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## Clinical Lectures.

### DEFORMITY OF KNEE PRODUCED BY RHEUMATOIDAL ARTHRI- TIS—OPEN WOUND SEC- TION OF TENDONS AND FORCIBLE STRAIGHT- ENING.\*

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POLYCLINIC.

*Gentlemen:*—The first case I bring be-  
fore you this morning is the one I had  
before you at the end of our last clinic,  
the patient with a contraction at a right-  
angle of the knee joint, due as you will  
remember to rheumatoid arthritis. You  
will also remember that I explained at that  
time why I did not then operate, namely,  
on account of the premature appearance  
of menstruation. On Saturday last I per-  
formed the operation, the menstruation  
having ceased, proceeding by vertical open  
incision to avoid cutting the external pop-  
liteal nerve which lies close to the biceps  
tendons. Through the incision the nerve  
stood out prominently exactly in the track  
of the knife, so that I could hardly have  
avoided cutting it had I adopted the sub-  
cutaneous method. It was directly in  
contact with the biceps tendon. I divided  
the tendon of the semi-membranosus and  
semi-tendinosus subcutaneously as there was  
not a similar danger. As soon as these  
contracted structures were divided con-  
siderable exertion was required to place the

knee in a straight extended position. I  
then applied a plaster of Paris dressing  
from the foot to the knee and another ap-  
plication from the knee to the hip and  
when these had hardened I applied the  
connecting iron side bars and covered  
the ends of them with more of the  
plaster of Paris. This makes a rigid appar-  
atus leaving a space of about four inches  
around the knee so as to provide for the  
application of the dressings. The patient  
has had but very little pain since. Her  
temperature has remained practically  
normal. There was at first a rise to a  
point near 100° which is usual after any  
operation; then there was almost a complete  
subsidence of fever. The patient will re-  
main in the position in which she now is  
until the wound has healed and there are  
no signs of inflammation; steel braces will  
then be applied to maintain the position  
now held to prevent any yielding of the  
knee upon use, until a firm ankylosis  
takes place, when all apparatus will be  
dispensed with.

### EXTENSIVE TUBERCULAR DEPOSITS—EVAC- UATION OF A HIP ABSCESS.

I am very desirous always to show you  
results, and I would far rather show you  
the unfortunate than the good results,  
because in this branch of surgery the re-  
sults are not always the brilliant ones seen  
in other branches of surgery because  
of the difficulty of eradicating the cause,  
namely, tuberculosis. This patient has been  
presented to you before. The trouble be-  
gan as a tubercular caries of the lumbar and  
dorsal vertebrae, with a secondary involve-  
ment of the hip-joint requiring an incision  
of the joint, and subsequently the incision  
of another portion of the femur, and  
again, by Professor Forbes, the removal  
of another portion of necrosed bone. With  
drainage applied the sinuses closed after  
these operations which were necessarily

\*Delivered at the Jefferson Medical College  
Hospital.

incomplete because of the impossibility of removing all of the diseased bone. Unfortunately, however, this case is an example of the results of those cases where operative procedures were resorted to too late. You will remember the large sinus just above Poupart's ligament which extended into the pelvis and thence in direct communication with the hip joint. The abscess on the side of the trochanter did very nicely, but on Tuesday last I recognized fluctuation and redness extending almost to the knee-joint. I bring the case before you this morning to open this abscess and afford increased drainage. This illustrates the course many of these cases are apt to run. There is an invasion of almost every part of this child's body with the tubercle bacillus, and the disease is constantly manifesting itself in new places. The question that must arise is: What shall we do here. Amputation at the hip-joint is not justifiable, for even though I should get rid of a large portion of the tuberculous tissue I know that back of this are the diseased lumbar and dorsal vertebrae and the acetabulum is perforated giving exit to pus into the pelvis. I must therefore resort to a more conservative form of treatment and hope, for there is hope, that the child will recover. The time is past when we can say that even in so desperate a condition as this one such a case is hopeless. I shall secure drainage and endeavor to keep the parts aseptic by washing the cavity out with peroxide of hydrogen and injecting with the iodoform emulsion. Observe this long cicatrix upon the side, and note how thoroughly the wound has healed, all due to the most absolute antiseptis and asepsis. The point of incision here shall be in the median line of the thigh away from the line of the femoral artery and at the point where the fluctuation is most marked. This is a trifling operation, but it is an illustration of what must be done in these tubercular cases. Wherever pus be found, I care not what it is, whether the old fashioned "laudable pus" the existence of which is now no longer recognized, or whatever its source may be, the proper thing to do is to get rid of it by free incision, and afford drainage.

The aspirator so frequently resorted to but a few years ago is rapidly taking its deserved place in the museum of curiosities

or when used at all is used for diagnosis of obscure cases.

The freedom with which exploratory incision may be made renders the use of an aspirator even for diagnostic purposes unnecessary, or at best of doubtful efficiency.

One of the principal objections to its use in the evacuation of an abscess lies in the mechanical impossibility of all the material passing through the trocar, and of the unsatisfactory manner of injection of remedial agents when it is employed.

The withdrawal of the mere fluid part only is not conducive to a closure of an abscess cavity and by its use the evacuation of the caseous portions and fibrous detritus can not be accomplished. I am not in the habit of using the aspirator even for diagnostic purposes except on very rare occasions for at the best it can only prove the presence of pus and does not indicate the origin or extent of the accumulation or the cause.

Free incision facilitates complete evacuation, the removal of the exciting cause, and the permanent closure of the cavity, and when done with aseptic precautions is not accompanied with unfavorable conditions.

Having made the incision and evacuated the pus, I shall now proceed to wash out the cavity thoroughly with peroxide of hydrogen to entirely burn out or oxidize the dead tissue that it has access to. I shall then inject a ten per cent. emulsion of iodoform to keep the parts clean and to destroy the germs. The temperature of the child will almost immediately fall one or two degrees. I am not desirous of tracing the sinus by means of a probe or my finger, for I am sure it is not far from, if not in, the hip-joint, and further removal of necrosed bone is impossible. I wish to reiterate one point of great importance, and that is, do not inject the bichloride of mercury solution first, and then the peroxide, for the bichloride of mercury coagulates the albumen and prevents rapid action of the peroxide of hydrogen. Inject the peroxide of hydrogen first, and then the bichloride if you use the latter and then follow with the emulsion of iodoform which is more effective than the powder because it fills up every cavity and renders the recovery more satisfactory. You can see the bubbling of the

peroxide of hydrogen showing that it is proceeding with its destructive work. I shall show the result of this treatment on some future occasion.

#### RICKETS, BOW-LEGS, KNOCK-KNEE.

I bring before you this morning a class of cases which as yet I have not shown you in this winter's course. I cannot for want of time enter into the pathology of rickets, but I want to tell you something of the subject. I wish to speak of rickets as an element in the production of deformities. This child illustrates a form of rickets that we very often see, namely, bow-legs, called also genu valgum, genu extrorsum and out-knee. Observe first the position of the legs, how they are distorted from the straight line into the position of bow-legs. There is not a deformity in the body that exists as a single deformity, and particularly does this condition of bow-legs show this. The deformity of the legs has produced a deformity of the ankles in the form of talipes valgus. The curvatures of long bones generally begin to show themselves between the ages of three and six years, and they almost invariably occur in badly-nourished children and those who have manifestations of rickets in other parts of the body. It is a most unusual thing not to have an enlargement of the epiphyses of the long bones. This enlargement is well-marked in this patient at the wrists and at the ends of other bones. I shall look for what are called "rosaries" or nodules at the juncture of the ribs with the costal cartilages, and I find them well-marked. Now notice the alteration of the axes at the knee-joints. When the legs are flexed to a right angle the thighs and legs are nearly parallel, but if I extend the leg the bowing occurs. The bowing is due in part to an unnatural obliquity of the condyles of the femur. When the head of the tibia is thrown under the posterior surface of the condyles no deformity is apparent, but the moment I bring the leg out from that position it is thrown into the deformed position. There is also a condition of bowing present which is a particular feature, but is not an essential feature, namely, an enlargement of the epiphyses of the bones. Notice now the condition of the ankle-joint. The enlargement here is marked. If I were to examine the cranium I should doubtless find some

other point of view. I shall now ask you to notice the clinical phenomena in these other cases.

#### RACHITIC ANTERIOR BOW OF TIBIA.

On the left leg of this little girl you will observe a manifestation of a different character. There is an anterior bowing of the crest of the tibia on this side. The right leg is almost straight and natural in appearance. When the child first came to the hospital it was in a condition of very pronounced bow-leg but under proper mechanical and therapeutic treatment this has disappeared leaving only the present anterior bow of the tibia. The obliquity of the knee has entirely disappeared. This anterior bowing is one of the most unsatisfactory conditions to deal with because it is impossible to put any pressure on this crest without producing suffering and cutting through of the tissues. The sharp knife-like crest of the tibia has no covering of soft tissues except the skin and pressure upon this sufficient to be effective in correcting the curvature will inevitably produce slough, and therefore mechanical treatment is not to be considered.

#### KNOCK-KNEE.

Now observe another case. Here is a condition of approaching knock-knee known also by the names genu varum, genu introrsum, etc., in knee. It is only beginning, but it is therefore a proper time to prevent the progress of deformity. Notice especially the position of the left foot which is the condition that attracted the attention of the mother and caused the child to be brought here. The enlargement of the condyles is very perceptible, and the beginning deformity though not in a gross form is also very perceptible. The rosaries are to be found here also, and the enlargement of the wrists. In the sitting position the angle of the knee-joint is in the normal position, but you can see a beginning curvature extending from the knee to the ankle. The child has also a slight rachitic curvature of the spine. Also see the pendulous abdomen, which is generally found in these patients. This may be due to an accumulation of fat, or it may be an associated phenomenon of the disease. The question now is, how are we going to prevent the curving and any increase in the curving. Your teachers who will dwell at length upon this de-



formity inducing disease will tell you that the condition depends on malnutrition, and that the bones are soft from a deficient deposition of lime salts. Then we must administer remedies which produce hardness and the deposition of salts, and, secondly, we must study the application of methods of mechanical restraint. The steel apparatus is preferable for the latter purpose, because it can be adjusted from time to time.

The joints should be placed in the position to favor the mechanical functions of normal joints with pads so arranged as to restrain all bending of the bones. At the lowest joint, the malleolus, for example, in this case of bow legs, we have a support placed, and then above the ankle midway between the ankle and knee at the point of greatest curvature there is a resistance pad and again at the knee is another. This apparatus is applied at first in a position which will do no good merely to accustom the child to wearing it. Then gradually we get it into proper position by adjusting the pressure pads to accomplish the greatest good without being unbearable. It must be kept on day and night to prevent increase of the curvature, being removed only for the necessary washing of the feet and legs and then re-applied. Now, with reference to the deposit of bone salts, various methods have been suggested, but the most satisfactory I have found is the administration of phosphorus in grain in one-half teaspoonful of cod-liver oil. This constitutes the best form of treatment for the prevention of the condition and favors the deposit of salts. If it is not well borne the syrup of the iodide of iron or the syrup of hypophosphites may be used. But better still, attention must be paid to the proper nutriment for the child to take. I believe rickets is frequently caused by the use of patented farinaceous foods and when I find that such is the case I always stop that and try to imitate the mother's milk. Children of American parents rarely show rickets. Generally it is found in the children of the Portuguese, Italians and negroes, where the diet of the nursing mother is inadequate to supply proper nutritious milk for the infant. To remedy the nutrition will therefore always be the first step in the prevention of these deformities, in the prevention of their progress as well as in the correction of deformities already existing.

## Communications.

### AN OBSCURE CASE OF APPENDICITIS MASKED AND COMPLICATED BY OVARIAN ADHESIONS—OPERATION AND RECOVERY.

By GEORGE I. McKELWAY, M. D.,  
GYNECOLOGIST TO THE PHILADELPHIA  
HOSPITAL.

Early in June of this year, Marie K., a Swede, came to me with the following history: She was twenty-four years old, single, a ward-maid in a hospital. Until three years ago she was in robust health. About then, however, she began to have excruciating pain in the right ovarian region at her menstrual periods and had, constantly, tenderness there on pressure. About two years ago she consulted a gynecologist, who found a retroverted uterus and inserted a pessary. She could not retain this, however, because of the pain it caused her, and did not return to his care. She lost flesh, became pale and weak, and unable to work; and in this condition consulted me.

A vaginal examination showed a retroverted uterus bound down by adhesions, and an exceedingly sensitive, adherent mass, the size of a walnut, to the right of and beside the uterus. I took this to be an enlarged ovary itself bound down, and causing the binding down of the uterus, by reason either of an inflammatory condition in it, or in the tube, or both, and advised an abdominal section. To this she consented, and I sent her to the Presbyterian Hospital, where I was at the time substituting for my friend, Dr. E. L. Duer, and operated by coeliotomy on July 9th, 1892.

After getting my fingers into the peritoneal cavity, I found the uterus bound with adhesions, as I expected, and freed it. The left ovary and tube were free and normal. The right ovary, the distal end of the appendix vermiformis and the adhesions about them formed the mass I had felt through the vagina. I carefully freed the ovary and appendix, and brought them and the tube up to the abdominal wound. I carefully separated all adhesions and



found both tube and ovary apparently healthy. The ovary was considerably larger than was the left one.

Examination of the appendix showed it to be very tense, erect, curved, very long and increased in diameter to the size of a large lead pencil. I removed it, and as there seemed to be no condition of the ovary or tube justifying their excision, they were not disturbed. The abdomen was closed without irrigation or drainage and the patient made an uneventful recovery.

The removed appendix showed no perceptible evidence of leakage or rupture. It was five and three quarter inches long, and its mucous surface was highly congested. It contained no pus, but did contain two fecal concretions the size and shape of a grain of wheat. It ruptured, on handling, at about its fourth inch, at the place where the fecal concretions were.

The patient is apparently well. She has gained flesh and has menstruated twice since the operation with very little discomfort. A vaginal examination shows her uterus to be in normal position, and reveals neither the pre-existing mass nor the exquisite pain on the right side she formerly suffered when examined. She believes herself well.

The case is interesting because, as I believe, the condition of the right ovary and of the uterus was secondary to the inflammatory condition of the appendix, and furthermore, because while pain and tenderness and a tumor were made out in the ovarian region, there had never been complaint or evidence of any of the three where they are generally expected in appendicitis, i. e., about McBurney's point. There was no history of any thing like an acute attack of peritonitis or appendicitis, and the exacerbations of pain always occurred at her menstrual periods.

It is instructive because of these circumstances and further teaches the oft repeated lesson of the difficulty and, sometimes, impossibility of exact diagnosis of intra-abdominal and intra-pelvic conditions.

Another most important matter is, that despite the fact that the one ovary was enlarged, adherent, and possibly much congested because of its circulation being obstructed by these adhesions, yet her restored health and her freedom from pain up to this time justify me in not having removed it. I believe that its condition and much of her pain was occasioned by its

strangulation and that the freeing of it would restore it to its normal state and relieve the patient of any pain caused by it. As I have said, events so far have borne out this theory. Is it not possible that in many more cases the freeing of adherent ovaries may, because of the rehabilitation of their circulation and so their restoration to the possibility of normal performance of function, result in much better things for the patient than their removal? It is not proven that adhesions about an ovary, healthy save for conditions caused by these adhesions, are sufficient reason for its removal and yet we constantly read of an ovary removed, apparently as a matter of course, because "enlarged" or "adherent," and infrequently its sound fellow (may be sister is the better word) is also excised because the other was.

In the operation, and in the subsequent care of the patient I was most intelligently and thoroughly assisted by Dr. J. H. Girvin, then a resident physician in the hospital, to whom my thanks are due.

#### WINTER COUGH AND NOSE OBSTRUCTION.

Mayo Collier says (*Lancet*) that the frequency of chronic winter cough, laryngeal catarrh and cold in the head is unfortunately, in this country, Europe and America, notorious. He has recently shown from the examination of over 1,000 living and 5,000 dried skulls that some irregularity of the nasal septum, causing more or less obstruction to nasal respirations, is a constant feature of nine out of every ten persons living in those countries. Facts are steadily accumulating, and the conviction is becoming established with many who are competent to judge "that chronic winter cough, laryngeal catarrh and post-nasal catarrh, with all their consequences, are in a majority of cases the direct result of breathing unfiltered, cold and dry air that has not passed through the proper respiratory gate." This proposition can only be refuted by the evidence to the contrary, and established by showing that every person suffering from winter cough or laryngeal catarrh or a majority of these, has some marked obstruction in the nose. This investigation is now proceeding at several centers, and it is with the object of still further directing attention to the subject that he writes.

## SUCCESSFUL SURGERY.\*

By F. A. DUNSMOOR, M. D.,  
MINNEAPOLIS.

The great reduction in the mortality in surgical operations during the last decade is due to the adoption of the germ theory, and to the fact that there are more experts (and by expert, I mean those who know by touch, sight and location healthy or diseased tissue; when to tear and when to cut, and are competent to face any hemorrhage; who realize what shock means, and who say *no* to the petitions for the impossible operation). We are also indebted to the better appliances of the present day, and to the greater cleanliness, which is next to Godliness—in surgery, next in advance.

It has been suggested by many that the wonderful success of Tait abroad and Price in Philadelphia impair the value of the germ theory. This reasoning is fallacious; would any practical man declare it to be unnecessary or foolish to lock the door until the night the burglar attempts an entrance? We are not all mind-readers, we *keep* the key turned that the protection may be sure. It is absolutely certain that if no germs of disease are about it is needless to use germicides in any operation.

To grow corn, corn must be planted, when nothing but corn will be produced. Pus will never appear in a wound unless there has been exposure to a pus-producing germ, but where there has been such exposure it is certain to follow as if the patient had been vaccinated.

The germicide is *per se* of no advantage to any clean wound, nature alone supplying every requisite for healing and union, and making astounding cures when allowed by non-interference. It is protection for home industry "out McKinleying McKinley." If the surgeon, assistants, dressings, sponges and patient have about them *no* contagious products it is hardly necessary to try to kill bacteria which may be miles away; but woe to him who relies on this exemption where there may be a possibility of contagion; ill consequences await the most ingenious operator without the competent germicide.

Again it is argued that the great major-

ity of our experts in the vast domain of surgery, using complete antiseptic precaution fail in producing as good results as Dr. Tait or Dr. Price. This must not detract from the value of the antiseptic precaution, for if *anything* be proven in surgery it is that the reproduction of disease, or infection is accomplished by transplanting bacteria; but it is due to other causes, the greatest being the lack of personal ability, mental power and dexterous facility combined with the confidence of the patient, begotten perhaps by the wondrous record and reputation of the operator.

The surgeon may have prepared for every onset of bacteria, but if he be himself incompetent, neither saltpetre nor bichloride of mercury will save him nor his patient from disaster.

The famous operators who get on without germicides, are more particular as to surrounding influences, such as time, place, barometer, filth, fear, hope, assistants, etc., etc.

There are so many risks likely to be overlooked when we let the great light of antiseptic relief satisfy our anxiety, that one must be a great general who meets and successfully combats them all. That time is never wasted which is spent in watching and studying the preparation, manipulation and management, both before and after the operation, of a man of vast experience. We should consider that man as good a seaman who avoided the shoal, as one who piloted his boat through it.

It is vastly better to steer clear of complications than fight them. Courting the patient's confidence is our best evidence of gallantry. Agreeing with superstitious victims as to Fridays and fatal anniversaries, and changing conflicting dates is not weakness but strength; better and easier is it than trying at this period to inculcate in their minds the idea of a higher education.

At an imperative operation the omission to quote to the patient favorable statistics is a blunder, and in contrast to padded results tabled for our own delusion by would-be surgical bombasta.

Experience proves the danger of operating while the barometer is lowering.

Personally I am satisfied that the morning hour is the best for the operation, although advices from abroad make it afternoon.

\* Read before the Department of Surgery of the Minnesota State Medical Society, June 16, 1892.

The empty stomach, the night's rest, and especially the waxing resources of the day, which are so much greater than those of the night, commend it to me.

Next to the patient's confidence one's own is of value. The timid operator who delays, who is incomplete (danger lies in what we leave; not what we remove), who continually relies upon associates, upon repeated last looks, like lover's last good byes, who doubts about drainage, etc., etc., immensely damages the successes under contemplation.

We believe it to be far better to have one's own assistant for all operations, and that all compliments, consultations and divisions of responsibility should be made beforehand.

It is necessary first to be a man before one can be a surgeon. The qualifications of the first are multiple enough, and the standard must be to the individual himself satisfactory, but of the latter's equipment considering what he has to meet, no knowledge should be considered too trivial, no dexterity or excellence too great to be obtained.

We deprecate undue haste, but unquestionably the patient is in constant and increasing danger while depressed by anaesthetics, from the necessary or unnecessary exposure, the lowering temperature, from the rapid evaporation from the body's surface, by reason of irrigation and damp covering, and the constant sanguinary depletion, great or little.

The time of such exposure and irrigation of the divided sensory filaments should be shortened as far as possible by the strenuous cultivation of expert manipulation.

As to the question of which precaution may be dropped, the best preparation for success is to employ every one that you would require were you yourself the patient.

And after all is said and done, when one is fully prepared to ensure constant success in surgery, we believe he is one of the most learned men on earth, and his life and work too valuable to be spent on anything else.

**PRURITUS ANI ET VULVÆ.**

The following salve (*Lo Spimentale*, No. 16, 1891) is recommended:

Oil of sweet almond.....gms. 5.  
Vaseline.....gms. 25.  
Apply locally.

**FORCED RESPIRATION (FELL METHOD) PER FACE-MASK, AND TRACHEOTOMY IN DIPHTHERIA.—REPORT OF CASE.\***

By GEORGE E. FELL, M.D., F. R. M. S.,  
OF BUFFALO, N. Y.

The following case is presented with the belief that it has some features of novelty of an interesting character and

1. To illustrate how forced respiration may be of great value in surgical operations associated with conditions of asphyxia.

2. To illustrate its value per face mask and also tracheotomy in cases of membranous diphtheria and croup.

3. To demonstrate the value of peroxide of hydrogen in asphyxia produced by membranous exudates in the trachea and bronchi of the lungs.

The history of the case may also prove a valuable lesson to parents with children suffering from throat trouble and who hesitate to call a physician in time.

A resident of Buffalo, whose family consisted of wife and four children, the eldest a daughter nine years of age; a son seven years and three months; a daughter four years, and an infant son two years of age. The eldest daughter was taken ill with throat troubles and general disturbance of the system. She was quite sick and was taken from school. On the 29th of March, 1892, the eldest son was taken sick, and he, like his sister, was treated with home remedies until about 5 a. m. on the Sunday following, June 4, when the father discovered him in a cyanotic condition, breathing with great difficulty, and evidently in great danger. I was called about eight o'clock in the morning, and arrived at the residence an hour later. On examination I found the four children ill with diphtheria, the exudates being quite clearly marked in the eldest daughter and son. The son was respiring with great difficulty, and his life was in immediate danger. I informed the father there was only one thing that could be done at

\*Read Before the Section of Surgery and Anatomy, at the Forty-third Annual Meeting of the American Medical Association, held at Detroit, Mich., June, 1892.



that time, and recommended tracheotomy as a means of holding the case, but held out no hope of ultimate recovery of the child. The younger children were also ill, the exudation however not so extensive, as the disease had affected them later than the first two. The mother desired the operation to be made. I sent for Dr. Colton, near by, to assist me, but before we were ready to make the operation the lad became unconscious from the cyanosis, and necessarily in a very desperate condition. He was placed upon a table and the initial incision made for the operation of tracheotomy. The blood was purple. No anæsthetic was used, as it was not necessary. A few moments after the first incision was made Dr. Colton called my attention to the fact that the pupils of the eye were rapidly dilating. I had fortunately prepared my forced respiration apparatus so as to have it ready for immediate use should occasion warrant, and had it not been ready I undoubtedly would have had the experience which very frequently comes to some surgeons, of death occurring during the operation. I immediately placed the forced respiration cup upon the face and respired for the little fellow, resulting in changing the blood to a bright scarlet in the wound in the neck and causing the return of auto-respiration. I proceeded with the operation, and found it necessary, before I completed it, to repeat the respiratory work with the forced respiration apparatus some six or seven times, in some instances having to respire quite a little time before auto-respiration was re-established. This is an unusual and peculiarly interesting fact, associated with the question of interference with respiration through exudates in the respiratory tract, that it is possible (it may be for a short time only) to breathe, retain the life of a patient, overcome the influence of the exudate and tone up the system so as to enable auto-respiration to be carried on. I completed the operation and placed the tracheotomy tube in the trachea, and even then found it necessary before consciousness returned to respire some time for the lad. After becoming conscious he breathed with very little trouble for quite a period of time. The general treatment directed was a spray application, to the throat and nasal passages, of the peroxide of hydrogen, about 30 per cent. aqueous solution. The father was di-

rected to use this in the wound in the neck if found necessary. The afternoon of the day of operation revealed a condition similar to that which existed after the operation in the morning. The boy was moving around the house although the respirations were at all times more or less labored. At intervals the inner tube of the tracheotomy-tube would close up with the exudate and require frequent cleaning. The father stated on my second call that if he had followed my directions to merely spray lightly the wound in the neck, his boy would have died before my return. He found it necessary to place the tube of the spraying apparatus in the opening in the neck, or in the tracheotomy-tube, frequently to prevent the cyanotic condition from ensuing; that the "spray appeared to liquify the membrane, or the matterly substance, and cause it to come away in a foamy, frothy state." During the afternoon the condition of patient became worse, the membranes filling up the trachea apparently, so that Dr. Colton, who was present, applied the forced respiration through the tracheotomy-tube, again relieving the little patient from the severe dyspnoea which prevailed at the time. Sunday night the case progressed about the same, frequent resort having to be made to the peroxide of hydrogen to enable the little fellow to get along at all. On Monday and Tuesday extensive membranous casts were coughed up and passed out of the tracheal opening. The boy retained his vigor under the adverse conditions existing until Tuesday afternoon, when the exudate seemed to be increasing and interfered with the respiratory efforts, which condition could not be overcome, even by the forced respiration-apparatus, and about eleven o'clock Tuesday evening the patient died from exhaustion and heart failure.

The other patients in the house had upon my arrival been placed upon the common method of treatment which I used in these cases, tincture of chloride of iron, chlorate of potash, bichloride solution and so on internally, with the peroxide of hydrogen spray used every ten to fifteen minutes. While the exudates in their cases were very extensive, there appeared to be no serious invasion of the lung tissue and they both made a nice recovery without any serious complications.

It was very clearly evidenced in the case

of the boy that he would have died before I could possibly have performed the operation of tracheotomy had it not been for the forced-respiration apparatus. How many cases of a serious character might be benefited, or have life retained by such work, and tided over the most serious results, cannot be foretold. It is unreasonable to assert that some patients may not recover who are as seriously sick as was this young boy.

Regarding the peroxide of hydrogen, its value was unquestioned. It produced liquefaction of the membranes in the throat; but whether a weaker solution would have proved more satisfactory or not, I am not prepared to state. As mentioned, the solution was about 33 per cent., and this apparently produced no uncomfortable effect when sprayed into the tracheal wound. This treatment appeared grateful to the patient in his distress, as did also the forced-respiration application when it was made. In fact he eagerly requested that it be utilized later in the case, as it had relieved him once or twice. But of course, the difficulty was in the prevention of the exudates, which ultimately prevented the respiratory process from being carried on, weakening the patient so that the heart succumbed to the strain put upon it. I think there is no question from the result of the cases that had this boy been placed in time under the treatment to which the other children were subjected he might have recovered.

This paper is presented to this Section on account of its bearing upon an operation the surgeon must frequently perform, and if through means of this character the surgeon may be prevented from experiencing that most unenviable notoriety of losing a case during an operation it will be worth the time expended.

#### MORPHINE-VASELINE.

The following formula is proposed as an agreeable and easily absorbed combination:

R Chloroform, morphine .....	gr. iij.
Chloroform, pur. ....	℥ssj.
Vaseline .....	ssj.

The chloroform favors the absorption of a larger amount of the morphine and causes it to be evenly distributed.—*Hospitals-Twende*, No. 32, 1890.

#### "COELIOTOMY," VERUS "LAPAROTOMY," AS A SURGICAL TERM.

By ROBERT P. HARRIS, A. M., M. D.,  
PHILADELPHIA.

When you perform an abdominal section, and report the case; under what scientific term do you describe the operation? You probably call it a "Laparotomy," because hundreds of operators are in the habit of using the same word, or its synonym, in a dozen countries and languages.

Where did this term originate? You say it has a Greek derivation (the language of Greece having been the tongue of the first anatomists) and comes from two words, *lapara*; and *tome* to cut. Now, what did the Greeks call the *lapara*? It was certainly never the abdomen.

Did you ever look carefully into an ancient Greek anatomy to find out what the abdomen was really called in their language? The word *belly* appears ten times in the English version, of the New Testament; did you ever note that the original Greek has the word *koilia*, and never *lapara* in these ten places?

Rufus, of Ephesus, a distinguished physician and writer, born A. D. 112, wrote a paper entitled "Names of the Parts of the Human Body," in which he has this significant sentence: "The *omphalos* (navel) is the hollow which occupies the middle of the *koilia* where we cut the veins that nourish the fœtus, the middle part of the hollow is the *akromphalon*" (top of the naval.)

"*Lapara*" is a very old Greek term, and was applied in the time of Hippocrates to the parts between the short ribs and the iliac bone (the flank); and scores of old lexicographers have thus defined it. The operation for lumbar hernia, or laparocoele, was a true laparotomy; and so, also, is that of lumbar, or laparo-colotomy. The term *lapara* originally meant a hollow, and was for this reason applied by the early anatomists to the hollow of the waist. It was never used to designate a convexity.

The misapplication of the term "laparotomy" commenced in the year 1811 in the medical thesis of a Wittenberg student of the name of Fiedler, who wrote in Latin under the title "De Laparotomia." He had witnessed a true laparotomy performed

on October 17, 1810, upon a man of fifty with a diseased colon, as he lay on his right side. Fiedler wrote again in 1817, and took it upon himself to coin such distortions as "laparo-gastrotomia," "laparographia," and "laparo-hysterotomia"—his desire seeming to be to supplant the term "*gaster*," which really meant the belly, by the word "*lapara*," which a careful investigation would have taught him was not its Greek synonym. The mystery is how an error of this kind ever made the progress that it has in leading the medical world astray.

"*Koilia*" being the Greek word for abdomen, the natural synonym of gastrotomy in its old meaning is "coeliotomy," pronounced soft (se-le-otomy). This is not a new coinage except as to its terminal, for we have long had *coelio-paracentesis* for tapping the abdomen. The term coeliotomy has been adopted by Prof. Säger, of Leipzig; by Dr. J. Greig Smith, in his *Abdominal Surgery*; by Profs. Keene and White, in their *Text-Book of Surgery*; and by a number of well-known medical writers. This adoption gives us the compound terms *coelio-hysterectomy* (Cæsarean section) *coelio-hysterotomy* (exsection of uterus through the abdomen,) *puerperal coelio-hysterectomy* (Porro-Cæsarean operation), *coelio-nephrectomy* (abdominal exsection of the kidney), etc.

What characterizes the present position of our condemned term is its wonderful tenacity of hold in the nomenclature of gynecological writers who have admitted the error of its application in abdominal surgery. Two years ago I published a classical pamphlet on the subject and sent it to prominent writers in thirty different countries. I also sent a copy to every Fellow of one of our leading national medical societies just before it met in annual session in 1890, and their letters attested its effect upon their sense of reason. It convinced them that *lapara* was not the abdomen and that *koilia* was; but it did not break up the habit of use, as shown by the fact that four papers entitled "laparotomy" appeared in their *Transactions* for 1891, and the term was time and time again made use of throughout the volume, but no one said "coeliotomy" as much as once. The old rut is so easy to run in, and the laparotomy wheel will get in. It took eighty years to propagate the error, and it will take time to correct it.

## Selections.

### ABORTION—A LANDMARK OF GYNÆCOLOGY.

By FRED. BYRON ROBINSON, B. S., M. D.,  
PROFESSOR OF GYNÆCOLOGY IN THE CHICAGO POST-GRADUATE SCHOOL; ATTENDING SURGEON TO THE WOMAN'S HOSPITAL, ETC.

Abortion is the expulsion of a fetus from the uterus before the fourth month (no doubt the fallopian tube aborts many embryos into the peritoneal cavity when conception occurs near the fimbriated end). To understand the evil effects of abortion, one must analyze the anatomy (structure) and physiology (function) of the organ called the uterus. This organ consists of two parts: (a) the uterus and (b) the cervix. The function of the uterus is gestation and expulsion. The function of the cervix is protection. The cervix is a guard to the uterus; it is the faithful sentinel that wards off infectious matter from the uterus; it tells the uterus to quiet its troubled action. The cervix is the ante-room of a lodge where the guard strictly demands a password for entrance or exit. It does not share in gestation; it simply mechanically expands step by step with gestation, because the expanding uterus demands it. The cervix differs in structure from the uterus: (a) it has a different blood-supply; (b) it has a different nerve-supply—sober spinal nerves preponderate in it, while the sympathetic with its periodic rhythms predominates in the uterus; (c) its glands differ from the uterus; (d) its muscular substance is different. The cervix is generally still; the uterus is generally in a rhythm.

Now, an abortion is bad because it is unnatural, while a labor is natural. The cervix is never prepared far an abortion, while the uterus is always ready to start one.

From what has been said, it may be seen that the dangerous organ in abortion is the cervix. It is dangerous because it will not remain open. As soon as the fetus is expelled, the cervix contracts and closet up the cavity. With a closed cervix, the tubes act as sewers, and the peritoneum as a sink-hole of infection. Now, the greatest principle in gynæcology is *drainage*; and abortion cannot have good



drainage, as the cervical canal closes the sewer. Then gonorrhoeal and various puerperal infections run riot. The woman does not have much, if any, flow—so she gets up and walks around, with her infections enemy in close communion. Her extra exertions weaken her and bring more blood to the pelvis, which causes more secretions for the germs to thrive in, while the closed cervix allows no escape for the accumulating germs and secretions; these, taking the direction of least resistance, go through the fallopian tubes. The woman never recovers her elastic, juvenile step. It is common talk for a woman to say: "I have never been well since I had a miscarriage."

Now, I claim that, in those cases of abortion in which the woman is an invalid from pelvic disease year after year, the infection is gonorrhoea. In many cases it is the very gonorrhoea (endometritis) that caused the abortion. The gonorrhoea and spermatozoa were put into the woman's vagina at about the same time. Both progressed together until—physiology and pathology conflicted—abortion! Gestation progressed until the excessive rhythmic motion of the uterus conquered the cervix and opened it up.

Abortions frequently render a woman sterile. This is done by: (a) altering the tube so it will not transmit an ovum; (b) adhesions will not permit the fibrinated end of the tube to apply itself to the ovary; (c) the endometrium becomes so diseased that it will not gestate; (d) graafian follicles become so diseased that they will not be fructified. The ovary, I have noticed, after such infections becomes degenerated cystically. The whole story of sterility after abortion is: Infection, inflammation, adhesion, and degeneration.

The general practitioner's idea of abortion seems to be of a man shaking an apple tree. If a few apples fall off, there is nothing further to be done but to dispose of the apples. He seems to forget that the main damage is done to the tree.

Much is said about criminal abortions in this country. We only know of a criminal abortion because the woman became infected during the process. Many doctors perform abortions on women for money or pity. In almost every abortion that I have known of being produced, the woman had more or less infection. The men who do such work are generally rough and un-

skilled, and do not understand antiseptic or aseptic principles. I saw one case where the physician had torn the vagina and dragged some intestines out of it. He mistook the mesentery for the placenta. She died. Not far from where I lived, a woman thrust an instrument into the abdomen through the vagina, and died. Dr. Thomas reports a case where a woman passed a rib of an umbrella up through the vagina, and it went on through the diaphragm into the lungs; she died from the effects some time later. Even practicing physicians who criminally produce abortion do it very clumsily. A young woman of 24 came to my clinic at the Woman's Hospital; she had had an abortion produced on her by a neighboring physician, and he had actually lacerated the whole depth of the cervix for nearly three-fourths of an inch. A year after, she had a solid bunch of old adhesions on the left side—opposite the side of the laceration. It was presumably salpingitis and cystically degenerated ovary.

The line of pathological progress after an abortion is: (a) Endometritis; (b) *plus* endosalpingitis; (c) *plus* ovaritis; (d) *plus* peritonitis; (e) *plus* lymphangitis; and (f) *plus* phlebitis. Lymphangitis and phlebitis are rarer than endometritis *plus* salpingitis, *plus* ovaritis, and *plus* peritonitis.

I have seen in autopsy the connective tissues in the broad ligament as white as snow, but pyosalpinx existed. Another remarkable fact I wish to record is that I have seen double pyosalpinx with an endometrium which looked absolutely healthy. I have become convinced, of late years, that endosalpingitis in its worst forms can and does exist with a normal endometrium.

The statistics of abortion are very delusive, and so untrustworthy that they are not worth copying. Deaths from abortion are charged to different causes; but many occur, and many women are made invalids for life thereby. The Europeans call criminal abortion the American sin, while the American retorts by saying the European sin is illegitimate births. The American sin is the worst, for it causes a man to attack a defenseless babe which, cabined and confined in its narrow uterine quarters, is totally unable to defend itself. It is cowardly, because there is no bravery in killing innocent and harmless animals.

The causes of abortion are very various,

and not always ascertainable or even understood. But we must look for the causes of abortion in: (a) the uterus (and mother); (b) in the foetal membranes; and (c) in the foetus itself. In accounting for abortions, one must not forget the patient's previous history. Some predisposing cause has no doubt long existed. The cause of abortion often lies far ahead of the expulsion—the abortion is simply the effect of some old persistent cause. I found many abortions among women of an outdoor, active life, but I think that was due to trauma, for I noticed that as the seasons changed and these women began a new kind of work numerous abortions followed. I also noted that abortions from trauma or new and excessive bodily exertions passed over frequently with scarcely a trace of infection. One can easily note, in farm life, that, among women who suddenly begin to bind in the harvest field, many have an abortion in a few days (from trauma). Or let the season for digging potatoes arrive—when, especially in German communities, many women work in the field—and some abortions will follow.

The condition of the mother must be examined. I was once called to a woman in labor who had a very distinct attack of measles. When the child was born it was covered with a most intense measles rash. The mother's measles not only precipitated the labor, but infected the child with measles also. Acute infectious disease plays a rôle; also constitutional disease, excitement, or intense emotions (which means that the abdominal brain sends too great an irritation over the hypogastric plexus and creates excessive rhythm in the uterus). Among predisposing causes must be also mentioned the general spreading of catarrhal diseases. Endometritis accounts for many abortions; nor can we overlook diseased kidneys and heart as causative factors.

The foetal envelopes play a rôle in abortions. The membranes are liable to diseases. The fine chorionic villi which project from the foetal ball like fine hairs may enlarge to the size of a hazelnut and make the pathological condition known as hydatids of the chorion. Naturally the small chorionic membrane looks like a shaggy ball of wool. Its surface appears like the pile on velvet. But what a wonderful change occurs when all these fine villi of the chorion swell up and assume the

appearance of a bunch of large transparent grapes! Several specimens of chorionic hydatids have been shown in Chicago lately. My friend, Dr. Bailey, showed me a splendid specimen of these hydatids last month, taken from an abortion of four months. In Dr. Bailey's case the chorionic villi were club-shaped, there were countless jelly-like transparent cysts covering the chorion. The contents of the hydatids were of a viscid nature. Many of the cysts had very small pedicles. I noted that the cysts were so numerous that the child could not get sufficient nourishment from the most diseased part of the chorion. In this way the normal chorionic villi were transformed into pathological villi (cysts), and the foetus was starved to death. In degeneration of chorionic villi the foetus is starved, and abortion results. In that part of the chorionic villi which persists and forms the decidua serotina, or discoidal placenta, of man, I have often found circumscribed patches of hard cicatricial tissue. The salts of calcium are deposited in such diseased points. Such spots may be found on the remains of old limited inflammations, and no doubt such localized inflammations frequently proceed to abortions.

The placenta may be so placed that as the uterus expands it will be torn from the uterine walls and thus cause hæmorrhage, followed by abortion. But it must not be forgotten that the placenta is not very firmly attached to the uterine walls, and slight trauma will often loosen it. I have examined scores of animals, and the wonder to me is how such a weak connection between uterus and placenta can last through gestation without a rupture. The pig's universal placenta peels from the uterine wall with very little pulling. Though the cotyledonous placenta of a cow is more strongly attached to the uterus, yet slight traction destroys the connection. Unnumbered abortions arise from the separation of the placenta from the uterus, from mere trauma, *e. g.* a jog, a misstep, a rough ride, or an active walk.

The amnion may contain an excessive amount of fluid, and abortion result. Reports give as high as seven gallons. I saw a woman in Prof. Braun's clinic with such extensive hydramnios that life became endangered. Prof. Braun placed her under chloroform, dilated the uterus,

and delivered her of twins—which he had previously diagnosed. It is probable she would have aborted in a few days. The uterus may be so rapidly distended by hydramnios or chorionic hydatids as to quickly cause abortion. The amnion may contain too little fluid, and various inflammatory adhesions may result—the cord may adhere to any part of the body; the fingers may become adherent—and abortion follow.

So far as I can see, from the examination of scores of animals in pregnancy, and also from a practice of ten years, in which I have had quite a number of abortions among women, it seems to me that the death of the foetus is the most frequent cause of abortion. Foetal death becomes more impressive as a man examines gestation in its early stages in women, or in pigs and cows in the slaughter-houses.

It is a surprising matter that such a delicate thing as an ovum survives in an animal with such varied movements. The beginning foetus is as soft as jelly, and its structures are as delicate as a spider's web. Active movements are apt to snap its delicate structures, and it will often pass off in solution. I noted that great numbers of foetal pigs, from  $\frac{1}{4}$ -inch to  $\frac{1}{2}$ -inch long, in the slaughter-house, died from hæmorrhage. The smaller the foetus, the more apt it is to die of hæmorrhage. The hæmorrhage mostly occurred at the end of the umbilical cord or in the abdominal cavity. The little fellow was smothered by blood. Such hæmorrhages constitute a great causative factor in the death of young foetuses. The hæmorrhages of women have floated many an embryo to an early grave, and even the matron or doctor is none the wiser. Of course, when the embryo dies from being smothered by blood, it becomes a foreign body and is then aborted.

Syphilis is another cause that kills the foetus, and the result is abortion. This is no doubt the cause of habitual or recurring abortions. The foetus acquires gummata in its viscera (liver, kidneys, spleen, etc.), and death ensues. The bones of a syphilitic foetus are very distinct, and a post-mortem in a dead foetus will tell a physician whether to treat the mother and father for syphilis. It should be remembered that long pre-existing causes should be sought for in abortion, especially in repeated abortions.

The foetus may also die from any disease of its delicate viscera. I have seen intrauterine peritonitis show very impressive changes at the autopsy. Under the causes of foetal death would come the torsion of the cord to strangulation; abortion would follow it.

A curious feature I have witnessed many times in the lower animals is that after the death of the foetus it is not immediately expelled, but *decomposes*, *mummifies*, or is transformed into *adipocere*. I have seen some similar things in women. The best explanation I can offer for such a retained foetus is *tolerance* of the uterus; yet this is not a very satisfactory explanation. Such foetuses will remain a very long time in the uterus. In the cases of mummification and adipocere the endometrium often appears healthy and normal. In the case of foetal decomposition I have often found retained bones sunk deeply into the uterine wall, which was several times its natural thickness. Yet all such animals were fat and had been killed for butcher's meat. The blood-supply of the uterus became lessened, and the innervation-centre did not act normally. In such cases in pigs the uterus would contract so firmly down on the mummified or adipocere pig that the uterus would appear node-like; a bulb-like swelling would appear where a foetus lay, and between the foetuses the uterus would contract to a circumference several times smaller than that of the bulb or foetal node.

An important matter in abortion is to be aware of the *dangers* that it causes. I will place the dangers under a few heads.

The first danger of an abortion is *hæmorrhage*. I have seen many women almost bleed to death from abortion. I lost one from bleeding. And if they did not die from great loss of blood, they were ill for months from want of blood. They lost so much blood that what followed was—mal-nutrition, anæmia, and neurosis, a triumvirate in chronic female disease. So hæmorrhage must be controlled.

The second danger of abortion is *infection*. This infection may be followed by endometritis, salpingitis, ovaritis, partial peritonitis, lymphangitis, cullulitis, and phlebitis; the last five, from infection following abortion, are common diseases.

Then I have had fatal suppurative arthritis following labor.



I have also had fatal embolism following labor. Both arthritis and embolism may follow abortion.

A fifth danger may be the entrance of air into the veins.

Writers of complete works on abortion mention such things as tetanus and uterine hydatids following abortions, but I never saw such a case. I have seen puerperal mania, or melancholia, follow; but it was not very dangerous, except that suicide was attempted.

I have examined a large number of women who have had abortion, and what one finds on examination is the following: on introducing the finger into the vagina, an irregular, boggy swelling on one or both sides of the uterus. In my practice, the swelling has occurred seven times out of ten on the left side. The uterus may be normal in position or generally drawn more to one side than the other. This lateral boggy swelling of the pelvis is found between the uterus and the pelvic brim. After some experience one can usually distinguish the crooked, contorted, nodular tube and the ovary, in a mass of exudate. The more gently the examination is done, the more is discovered. The mass is generally up *toward the fundus*; hence it is probably tubal, and not cellulitis. One generally finds the pelvic peritoneum somewhat thickened on the diseased side. The disease lies mostly on the left side (seven in ten), on account of the dilatation and contraction of the rectum, and also on account of the venous current emptying at right-angles to the renal veins on the left side. The left plexus pampiniformis appeared to me to be larger than the right in nearly forty bodies dissected. If the boggy swelling in the pelvis appears within two weeks after the abortion, and is as large as an egg, it is likely a cellutic and not a tubal abscess of that size occurs much later.

Women with these pelvic swellings generally have painful menstruation. They have crooked, contorted, and convoluted tubes. From the crooked tubes they have premenstrual pain, or tubal colic, because the diseased tube, hampered by pathological conditions, cannot go through its peristalsis. I have noted that those women have much pain because the *rough*, untutored gynecological finger has actually irritated the tubes into peristaltic movements; such pain will often last two hours.

Large experience enables one to learn from *resistance* in pelvic examinations. But the young gynecologist should place the woman on her back, with thighs flexed on the abdomen, and then proceed *gently* and *slowly* with the bimanual pelvic examination. He should examine systematically every region of the pelvis. Though practical gynecology is hard to learn, because of the lack of teaching clinics for digital examinations, yet much can be learned from a single cadaver in a couple of weeks. The *treatment* of abortions may be summed up in the following:

1. Rest.
2. Drainage.

If one is called to see a woman who considers herself pregnant and has symptoms of aborting, he must satisfy himself by examination on these four points: (1) Has she had *hemorrhage* from the vagina? (2) Has she had *pelvic pain*? (3) Has she had *vomiting*? (4) Is the *os dilated*?

Hæmorrhage from the vagina is nothing but a symptom, and may pass over. Pain is very delusive, and but little reliance can be placed upon it. Vomiting is of a more suggestive character, because it probably comes from profound disturbance in the ganglia in the uterus; this irritation is carried up to the abdominal brain, where the irritating force is reorganized and then reflected on to the stomach by way of the gastric plexus, and vomiting results. Now, a sign is a distinct clew to the disease; a symptom is only an indication of a pathological condition; hence we say hemorrhage, pain, and vomiting are mere symptoms. However, if they are combined, *i. e.*, occur together, the presumption is strongly in favor of abortion being present.

But the *dilatation of the os* is the *sign* of abortion; when the *os* is dilated, the uterine contents are pretty sure to abort sooner or later. Hence digital examination of the *os* is the only real clew to the condition of the uterus. Under ordinary circumstances, if a woman aborts (traumatism being excluded), it will be close to the climax of a menstrual period. The first thing to do is to put the woman to bed and insist on her remaining there. Very frequently, when the physician arrives the *fœtus* has passed. But the placenta is still in the uterus. Right here arise two classes of gynecologists: one class would let it alone—leave it to nature; the other

class would remove it. It is very difficult to decide which course to pursue in each case. Only years of experience will enable a physician to judge for himself. I would say this much from my experience: if one can remove the placental remains aseptically, it is the wisest plan; but if there is any doubt, it is better to leave them alone. Remember that when a woman has a child without having been subjected to digital examinations, she is pretty sure to escape puerperal fever—I have never seen puerperal fever in such a case.

The midwife and the doctor carry puerperal fever. But we will take a case: Dr. A. is called to Mrs. B., who is aborting. What shall he do? If the pulse and temperature remain normal, he had better let her alone in bed, and do nothing, and expect. If fever arises, the best way is to put Mrs. B. to sleep and lift her on a table; then clean out the vagina with  $HgCl_2$  1:1000. Now seize the anterior lip of the cervix with a volsela and draw it down, introduce a dilator, and in *not less than* five minutes dilate the os. Be sure to dilate slowly. Introduce the finger and break up some of the placental adhesions. It is possible that a forceps will be required to draw out the fetus, but the whole thing soon rolls out. Now curette every corner of the uterus, using a dull instrument. The uterus should then be irrigated with hot water, and this will soon make it contract down. After it is thoroughly clean, pass some well-boiled gauze to the fundus, pack the vagina with it, and put the patient to bed. The gauze can be removed in from two to four days. If it be done aseptically, the woman is safe 97 times in 100.

The indications for this kind of treatment in cases of abortion are: (1) High temperature and pulse. (2) Hæmorrhage. (3) Retained placenta.

I have also treated many women expectantly. If the fetus was passed before I arrived, and some placenta remained, I have many a time left them to nature, and they recovered. I will say that, though a man be never so clean, at an abortion where the patient is infected with gonorrhoea she may yet have a distinct exacerbation of her tubal and pelvic trouble, because the active process of parturition has induced the germs by active feeding to thrive faster and invade new fields through new lesions. One must be just as clean at an abortion as at a laparotomy.

The gynæcologist, when called to a case of abortion with a general practitioner, will likely want to empty and curette the uterus; and that is often what the practitioner, will oppose—he thinks the gynæcologist wants to do too much and show too much “skill” to the family. The general practitioner will often say: “Let her alone; give her a physic and a little medicine, and she will be all right.” But one must not allow high pulse and temperature after an abortion to go by without *immediate* invasion of the uterus. The thing to find out, on a visit to a woman who has aborted, is the amount of temperature she has. The pulse is not so good a symptom, as she may have a high pulse from large losses of blood. The only safe place to take temperature is in the rectum. High temperature means infection, and every means should be used to stop it.

Another feature arises in abortion. One is called to a woman aborting, but the event is only known to be surely coming from os-dilatation. She is losing some blood, but the expulsion will not occur for many hours yet, and you are afraid she may lose too much blood in your absence. In such a case the whole vagina should be well packed with cotton balls (well boiled) dipped in a 4-per cent. solution of boracic acid. This will prevent serious hæmorrhage, but will allow the uterus to expel its contents. After 10 to 20 hours the cotton balls can be removed, and likely the fetus will be in the os or vagina.

Drugs are not of great service in abortions. Ergot would not aid a very great deal in expelling a small piece of retained placenta, and it only acts temporarily.

To properly treat all cases of abortion requires all the skill a man can command.

In discussing abortion (the fourth landmark of gynæcology), I have not attempted to be at all systematic, but have rather dotted down rambling remarks on the subject.—*Med. Age.*

Lemonade for diarrhoea—Hayem: (*Le Bull. Med.* Sept. 21st 1892.)

**R** Acidi Lactici.....10 grammes  
Syr. Simp.....200 grammes  
Aq. Dest.....500 grammes  
M. Dose half glassful.

This is especially recommended for the chronic diarrhoea of adults.—The lactic acid acts as a tonic and germicide.

## Society Reports.

### THE SURGICAL SOCIETY, OF LOUISVILLE.

*Stated Meeting, August 8th, 1892.*

The President, Dr. A. M. Cartledge, in the Chair.

#### RESECTION OF KNEE.

DR. JAS. CHENOWETH: Mr. President, I have a patient to exhibit, who was operated upon (resection) in January, 1891, by Mr. Mayo Robson, of Leeds, England, for tuberculous knee joint. I thought it would be interesting to the members of the Society to see the results of this operation. The patient is five and one-half years of age; had tuberculous disease of the knee joint for a year previous to the operation, and had worn splints constantly; was under treatment in the hospital most of the time. You will observe there is very little shortening of that leg and slight motion in the joint. He still wears a felt dressing. The child is in good health at the present time.

The leg was perfectly straight before operation.

DR. W. C. DUGAN: The question comes up here whether or not we should resect these cases in children. This question has arisen out of the fact that after the operation improperly performed, shortening was permanent. This question has been discussed a great deal of late years, some objections being raised to the operation, but I am sure in this case there will be no shortening, that is, there will be no more than after the operation in an adult, since there was no interference with the epiphysal cartilage. Shortening, or, rather, a failure of the bone to grow in length, is invariably the result of injury to the epiphysal cartilages—an accident which should rarely, if ever occur; so I take it that the objections are without any real foundation, and should never be arrayed against this operation, which, in my judgment, is a good one for certain cases. I think, however, that the leg is a little too much at an angle in this case.

#### REPORT OF CASE—RESECTION OF KNEE JOINT.

DR. W. L. RODMAN: Mr. President—This is the patient I hoped to have had present at the last meeting of this Society,

but, as stated at the time, he was ill and could not come. I wished particularly to exhibit the patient at our previous meeting as a companion case to the one Dr. Dugan presented.

A year ago last March, while working on the roof of a house, this young man fell some distance and struck his knee. After being taken home he noticed that there was a small indentation in the skin, as if it might have been made with the point of a nail, but he was satisfied that the nail had not penetrated the joint; it did not feel as if there was anything in the joint. He told his family physician that he was quite certain it had only gone through the skin. A very severe synovitis developed two or three days after the accident and the physician in attendance attributed it to the blow—just to the external traumatism. I was called to see the patient five or six days after the accident and we were still able to see a little opening in the skin. I found he had temperature of 102° or 103° F.; tongue very much furred; suffering great pain; joint was very much distended; the skin over the joint was very glistening, and the patient perspired profusely. I was satisfied that suppuration in the joint had taken place; I believed, also, that severe synovitis as he had at the time would not have resulted from external traumatism. I thought that the nail must have entered the joint, although the patient and his physician did not think so. As there was evidently a good deal of pus in the joint, I insisted upon doing an arthrotomy, believing this to be best thing for him, even if there was no foreign body in the joint. I made a very free incision in the joint, and at once came in contact with a rusty nail, without head, two inches long. I then made an incision in the other side of the joint, putting in two large drainage tubes, and irrigated the joint with chloride of zinc 1 to 500. This was practiced daily for two weeks, and I then removed the tubes. About ten days, I think, after he was hurt, erysipelas developed on his thigh, extending from the knee joint up to the hip. You will notice a number of scars along the front and lateral aspect of the thigh where I made incision in a number of places and evacuated pus. The cellular tissue of the thigh was almost entirely destroyed by suppuration; many pieces several inches long were removed at different



times. He had a very severe attack of erysipelas, and was laid up on that account for about two months. For the last fifteen months he has had about as good use of his leg as ever he had. The motion is not quite as good as it was six months ago, owing to his having hurt his knee recently, still, you will see the motion is very good indeed. He is able to work, and has been working ever since a short time after the operation, and walks about as well as he ever did, having just as good use of his leg as before the injury.

CASE No. 2:—This young man probably some of you will remember was shown at a meeting of this Society some time since at the Pendennis Club. He came to me from Trimble County (Kentucky) with a badly deformed knee, the result of suppurative synovitis of the left knee joint, which was caused by an axe wound into the joint. The suppurative synovitis which was opened at several different points by the physician in attendance, and which opened itself at several other points, left the knee badly ankylosed. The leg was so completely flexed that the calf almost touched the thigh, as you will remember. It was really painful to see him walk. The ankylosis was bony, there being no motion in the joint at all. I put him under chloroform to test this, and there was not the slightest mobility. I sent the patient to the Norton Infirmary, and, after preparing him for operation, decided that the best operation would be a modification of the Rhea-Barton operation. I think this operation better than any other, although I did not do any of the regulation operations. After washing him thoroughly and keeping his leg wrapped in gauze for twenty-four hours, I made a semi-lunar incision extending from the internal to the external condyle of the femur. I removed the patella first and then removed a wedge-shaped piece from the lower end of the femur just above the joint, but, instead of cutting only partially through the femur as Barton did, I went all the way through. After doing this, on account of the deformity which had lasted for five years, the tendons were very much contracted, and the normal relation of the parts was so much disturbed, that instead of doing subcutaneous tenotomies, I made five or six by cutting from without. I preferred this to the subcutaneous method, as the normal relations of parts were so

disturbed. There was a great deal of bleeding from the sawn surfaces of the femur, and this bleeding continued to such an extent after the dressings were put on that it saturated everything, even the plaster on the outside. This caused me to change the dressings a little sooner than I otherwise would have done. I think they were changed on the sixth or seventh day; the temperature had not raised in the meantime to above 100°F. and that was on the second day after the operation, there was a little odor to the discharges and I thought it safe to change the dressings at the end of a week. I found no suppuration at that time; it did, however, suppurate afterward at several superficial points—stitch abscesses. Several of us thought at the time that perhaps the leg was not quite as straight as it ought to have been, but the position now as you will see is about right; in fact, I think it is in an ideal position, fully as straight as it should be. He has not used his leg very much yet, but I think now everything promises to be favorable. The scars which will be observed on his leg were there before the operation, as a result of the suppurative synovitis.

DR. E. R. PALMER: Can this man walk on his leg at all?

DR. W. L. RODMAN: He has not tried it yet. I did not want him to walk on it until it had thoroughly healed; he will begin to walk very soon.

I wish to further state in regard to this case, that I did not remove the articular end of the femur. Barton's operation is to remove a wedge-shaped portion of the lower end of the femur, but he does not go into the joint. I removed the patella and a large wedge from the lower end of the femur. I think he will have as perfect a leg as we could possibly expect in a case of that kind. I kept a ten pound weight on the leg for about six weeks, which evidently straightened it and put it in better position than it otherwise would have been.

#### LACERATED PERINEUM.

DR. A. E. CARTLEDGE: In lieu of a prepared paper, I wish to refer to what to many seems a hackneyed subject. Several years ago the journals and reports of medical societies teemed with the best methods of operation, and the conditions demanding operation, in lacerations of the perineum. As some excuse for my re-

marks upon this subject, I will say that there has been a temporary suspension of hostilities in this direction, within the last few months. I have no original operation to offer, nor can I add anything to what has been said of the importance of the perineal body as a means of support to the uterus, bladder and rectum. In brief, I would say that I think we can well afford in a practical way to look upon rectocele, and cystocele, when occurring before the menopause as results of either subcutaneous or open rupture of the perineal muscles; hence the only logical operation for these conditions is a restoration of the perineal body. We are all aware that many cases of so-called endometritis, cervicitis, uterine engorgement, etc., that are daily treated in the offices of physicians by local applications, are only temporarily relieved and must be permanently cured by a restoration of the perineum.

What I desire to say in regard to the operation is this: After a careful study of the various operations, and the practical application of several of them, I am convinced that no operation so far perfectly meets the requirements in this condition. The importance of uniting the deeper structures, which was first brought out in America, is the greatest advance of any step in the operation. A combination of the ingenious method of Tait which so thoroughly preserves all tissue in a place where this is important, with the subcutaneous union of the deep structures by the buried suture, seems to come nearer fulfilling the indications than by any other method of operation.

In recent cases, after making preliminary incisions by the Emmett and Tait method, I have thoroughly dissected the deeper perineal structures, and while I do not claim to be able to bring in apposition individual torn muscular fibres as some writers have, the deep muscular structures are thoroughly united by catgut, working up from the bottom and closing up to the skin margin. This is accomplished by a continuous or crossed suture. The finishing part of the operation is made by the introduction through the skin, traversing the entire pre-sutured area, with silk-worm gut sutures, these acting as a brace or support for the subcutaneous catgut suture, which I deem insufficient as they will probably soften and give too soon.

The result of this combination is a thorough restoration of the perineum, giving for the depressed, concaved appearance a full, strong, pointing perineal body.

#### DISCUSSION.

MR. W. C. DUGAN: I would like to suggest another method of suture for laceration of the perineum, that is, use a suture with a needle attached to both ends, beginning at the bottom of this V. shaped cavity, then crossing them and secure them on the sides of the cavity, then crossing and still higher secure them and so on crossing and fixing them half a dozen times, instead of tying them, and then finally bring them out and make one knot on the surface instead of half a dozen. I have enjoyed the paper very much indeed.

Dr. E. R. PALMER: A point in the physiological aspect of the question: The statements made bring to my mind three cases in which rupture of the perineum destroyed the capability of sexual orgasm in the women. One of these cases was operated upon very successfully by Dr. Anderson, and I learned afterward that sexual capacity was fully restored as a result of the operation.

DR. TURNER ANDERSON: I am obliged to Dr. Cartledge for bringing this subject before the surgical society. I want first to say a few words in regard to the operation as it is commonly performed: It is hardly necessary for me to say anything about the advisability of primary operation. Wherever the perineum is lacerated it is desirable that a perfect coaptation as possible should be obtained. All laceration of the perineum should be operated upon, and the operation ought to be done as soon as possible, for the reason that if the first operation is not entirely satisfactory, it will give something to build upon and be of material assistance in a subsequent operation.

I would like to have heard the essayist speak upon the subject divided; that is, complete laceration, and partial laceration. In the incomplete lacerations, the operation of Tait is very satisfactory, provided we make the incision deep enough. In my operations I use silk worm gut as suture, the procedure being a modification of the Tait operation.

DR. A. M. VANCE: With a laceration say two and one-half inches into the bowel, I do not see how a good result could be ob-

tained without suturing the gut separately down to the sphincter fibres.

DR. J. G. OECIL: The question under discussion is one of especial interest; I consider it a very important subject from a surgical standpoint, because I believe that a successful perineal operation is one of the most difficult operations in surgery. Of course it is not surrounded with the immediate dangers on the table that we encounter in many other cases; not followed by the shock and other evidences that mark greater operations, but the successful coaptation of these ruptured structures with results which will show an improved condition, relieving the symptoms which have been prevailing since the accident, constitutes to my mind one of the difficult operations in surgery.

I believe that much of the discredit thrown upon Emmett's operation arises from the fact that it has been done by operators who have paid more attention to the skin than to the restoration of the ruptured muscles. Further, I think many operations for the relief of this condition have been unsuccessful because of a misconception in regard to what is called the "Perineal Body." Strictly speaking, there is no such thing as the perineal body. It is no more nor less than a muscular structure; you can dissect that structure as much as you please, and you can never separate that body which is called the "Perineal Body." It is simply the junction of these muscles, and when operations have been done to restore this torn perineal body, a space is looked upon, or, rather, a torn space, and the conclusion is that if this torn surface is renewed, the perineal body is restored; whereas, the ruptured muscles have retracted, their torn ends are not uncovered by the dissection, and consequently never reunited. I think many of the illustrations or sectional views showing the perineal body are entirely erroneous.

I, of course, agree with what has been said as to the necessity of these operations, and the symptoms which have been outlined by the essayist are those which are common, and failure to relieve those symptoms, is simply failing to get the proper conception of what is necessary in this operation.

Not long ago in another medical society, this subject was under discussion, and I remember one speaker, especially,

who could not understand how it was that a pessary would restore the perineal floor in such a way as to maintain a retroverted womb; he then went on to detail his own treatment or management of these cases, in which he brought out his method of replacing the womb, then packing the vaginal space posterior to the cervix holding the womb up in that way until he could get a satisfactory pessary to hold it up. Now, the operation as detailed by Dr. Cartledge takes the place exactly of the cotton and pessary and so I pointed it out to the gentleman in question at the time.

In these cases the natural support of of the womb is torn away, and the only thing is to restore it; that is, restore these ruptured muscles and connective tissue in that region. The methods of doing the operation are so many and are so complicated that I must admit I have often been confused very much by looking at the pictures in the text-books. They all suggest methods of suturing, with sketches, etc., all of which looks very nicely on paper, but are difficult to understand. The description given by Dr. Cartledge seems to be the most satisfactory method; simply uncovering, bringing forward and suturing the parts which have been ruptured and separated, building up the pelvic floor by continued lines of suture. In doing this operation I think catgut preferable because it will be absorbed; it should be re-inforced by strong sutures running through the skin.

DR. A. M. CARTLEDGE: I simply want to say in reply that this paper does not intend to offer an entirely original operation for the restoration of the perineum. After carefully performing the various operations employed by the different men in this affection, I have attempted to combine what I believed was the best principles of each. If I had to confine myself to the method of operation of any one man, I should give preference to that of Marcy; that is to say, the use of the buried suture alone, after thoroughly exposing the torn deeper perineal structures. However, I have thought in many cases that owing to the softening of animal suture as early as the seventh or eighth day, some additional means of support or apposition would be of advantage. To this end I supplement the buried suture of Marcy with an external silk-worm gut



suture passing this in the usual manner, traversing the already apposed deeper structures, thus acting as a brace to the subcutaneous or buried suture of gut. Certainly my results so far have been better by this method than by the single method of Tait, the older method of Emmett, or the method of Marcy alone.

#### AMPUTATION OF LEG.

DR. A. M. VANCE: I have one case that I would like to report: I was recently called to the Sts. Mary and Elizabeth Hospital to see a man sixty years of age, who, about six or seven months ago, sustained a compound comminuted fracture of the leg. Dr. Samuel attended him and wanted to amputate the limb, but the patient would not consent to this, and he attempted conservative measures which were carried out. The fracture united and after the expiration of several months, erysipelas developed, going from the foot to the thigh, numerous abscesses forming along the leg and thigh. The foot suffered greatly, all of the tarsus being involved. The fracture occurred about the middle of the lower third of the tibia. Amputation was advised when I saw the patient in consultation with Dr. Samuel, but he still refused. Finally he consented to amputation, and, assisted by Dr. Dugan, I removed the leg about six inches below the patella. Owing to the man's advanced age, and condition at time of the operation, we hardly hoped to get primary union, the whole limb being very cedematous and the tissues much matted together, more serum than blood exuding when the Esmark bandage was removed. Two rubber drainage tubes were used, which were removed on the third day. I saw the patient day before yesterday and was very much astonished to hear that he would be out in about two weeks. I found as pretty a stump as I have ever seen, absolutely healed by first intention.

I will state that I have never before seen as perfect a result from amputation of a limb in a patient of this age, and especially when the condition of the patient at the time is considered.

DR. TURNER ANDERSON: I want to ask the members of the surgical society one question, and that is in regard to the propriety of using drainage tubes. It does seem to me that we have arrived at that point in which the amputation of limbs,

for instance, can best be done without the use of drainage tubes.

#### APPENDICITIS.

DR. W. C. DUGAN: Since the last meeting of this society I have had a rather peculiar experience, having seen an unusually large number of cases of appendicitis. I have seen six cases, two died and four of the six were operated upon. One of the cases operated on died, the other one died without operation. The first patient a lady aged about thirty five, was in Indiana; there was a very large tumor most prominent in the postero-lateral aspect of the abdomen; temperature was low, ranging from 99° to 102° F.; patient had been treated for typhoid fever six or eight weeks. The attending physician called in aid, who made a diagnosis of pyonephrosis. I was asked to see the case and after making a careful examination, we concluded that we had a case of appendicitis. We made an incision in the abdomen, and found a circumscribed cavity containing several pints of very offensive pus. We operated through the loin; patient made an uninterrupted recovery.

No. 2. The next patient, a boy about sixteen years of age, I saw in the Southern part of this state. He was taken very suddenly ill with chills and severe pain in the left side of the abdomen near the umbilicus, and other symptoms which led the attending physician to diagnose intussusception. The boy grew rapidly worse, with symptoms of colic and complete intestinal obstruction. I saw him on the fourth day. He had had stercoraceous vomiting some time; profuse cold perspiration; in fact was in collapse. We opened the abdomen and removed about a gallon of offensive pus. When the cavity was opened the pus spurted up eighteen inches. The patient died of sepsis on the third day after operation.

No. 3. Another case I saw with Drs. D. T. Smith and Turner Anderson a few days ago; tumor plainly visible. The history of this case extended over two weeks; patient was taken with colicky pains in regions of the umbilicus. Lead colic was suspected inasmuch as he had been painting. The patient was able to be up and around for several days after first visit by Dr. Smith, but in walking assumed a stooping position, favoring right side. Two weeks afterward he was taken worse

and Dr. Smith was again called and for the first time found the enlargement in right side with pain accentuated there; I was then asked to see the case in consultation. Upon examination we found a tumor of considerable size in the caecal region, and extending down into the pelvis; we diagnosed appendicitis. There was one symptom I desire to call particular attention to, and that is pain in the bladder with frequent micturition. Now, this is not at all uncommon and the explanation is rational. We should not mistake this for cystitis. Dr. Anderson was asked to see the case and he made a very careful examination and said that he had never seen a case where he thought surgical procedure advisable, but thought this was one of the "border line" cases, and if we decided to operate, he would agree with us. After discussing the matter we concluded to wait until the next morning, unless something occurred in the meantime. At nine o'clock the same evening we had another consultation, and decided to send the patient to the Infirmary for operation. The next morning we found the patient very much improved; pulse which had been 130 the day before was 92; tumor had disappeared with the exception of a slight induration, and we were at a loss to explain it until the mother showed us the vessel which contained about a pint of pus, which patient had passed by the bowel that morning. This is a very important case indeed, and I think we have made a mistake in not operating. I believe that we subjected this boy to very great danger in allowing it to run over. In this case I would not have opened the abdominal cavity until after exploring the subperitoneal space and found the pus to be intraperitoneal. I think in all such cases where the tumor is low down, this precaution should be observed.

No. 4.—Another case I saw a few days ago with Drs. Baker and Bailey; the patient developed symptoms of appendicitis and evidently had a typical case. I was called to consider the surgical aspect of the case with these gentlemen, that is, whether an operation should be performed or not. I found the patient in very good condition, except that there was a great deal of tympany; elevation of temperature slight; pulse nearly normal (84); and expression good. We concluded not to operate since

the tympany and other symptoms were becoming less and less marked, but I suggested that the patient be sent to the Infirmary where he could be carefully watched in anticipation of a rupture of the abscess, if one existed. The patient's family agreed to have him sent to the Infirmary, but the next morning when the doctor visited him at seven o'clock, and this early visit was for the express purpose of having him taken to the Infirmary, he found that he had passed a good night; tympany had almost entirely disappeared; so, being so much improved he was not sent out to the Infirmary. He got along well through that day, but sometime during the night was taken suddenly very much worse, went into a collapse and died the next morning at six o'clock.

DR. A. M. VANCE: Up to the time of our last discussion of this subject, in the surgical society, I had never seen a case of appendicitis that I was willing to operate upon, and often wondered why it was we heard of so many operations for this condition in the East, and so few in this section of the country. Since that time I have seen two; one of which I operated upon at the Children's Hospital. The other case I saw in Elizabethtown Kentucky; patient was a young man eighteen years of age; found him in a state of collapse and advised operation at once, but the family refused to allow it with the meagre chances of saving the boy's life that I spoke of. These two cases of appendicitis have come under my observation within the last three weeks, and Dr. Dugan mentions having seen six, every one of which I believe ought to have been operated upon. I believe that every time we can demonstrate the existence of pus, it ought to be let out.

DR. TURNER ANDERSON: Referring to the third case mentioned by Dr. Dugan: I believe this was a border line case, and I stated at the time if the gentlemen decided to operate I would give my consent; but, at the same time, I remarked that I had seen such cases before and advised delaying the operation until morning.

Now, I do not believe that this was a case of appendicitis at all; I think it was simply a case of rectal abscess, and believe if an operation had been performed without making a rectal examination, a very serious mistake would have been made. The tumor was to my mind too low down

to have been connected with the cæcum.

DR. W. C. DUGAN: I assisted in an operation for this condition a day or two ago, and in this case the tumor was very low down—we were undecided at first whether it was a case of appendicitis or not. When we entered the cavity of the abscess, we found a large amount of pus and some two or more enteroliths, proving beyond all question that it was a case of appendicitis.

I cannot agree with Dr. Anderson concerning the case I saw with him and Dr. Smith. The location of the tumor amounts to nothing. I have seen several cases where there was no tumor to be detected in the iliac region. The appendix is not infrequently prolapsed into the pelvis, and, of course, in such cases the tumor or abscess would be low down. It is my practice in all these cases, to explore the rectum before completing my examination.

#### WASHING OUT THE STOMACH IN CHLOROSIS.

The *Wiener Klinische Wochenschrift* refers to a communication by Dr. Pick, who publishes the results of some observations he made in Nothnagel's clinic to determine the relation which exists between affections of the stomach and those not infrequent cases of chlorosis in which the leading symptoms are of a gastric character. Some connection between the two has been proved to exist in some cases of pernicious anemia. The *Wochenschrift* does not consider that Dr. Pick's contribution gives a decided answer to the question, but points out the importance of one result of the experiments. He found, as others have done before him, in all the cases an atonic condition of the stomach, which has not digested the food taken on the previous day, although the patient was fasting at the time of the observation. In these cases Dr. Pick was able to cure the chlorosis quickly by washing out the stomach at stated intervals. In several instances no benefit had been derived previously by treatment with iron. Washing out the stomach prevents abnormal decomposition, which by auto-infection causes the blood dyscrasia. Dr. Pick, with the same object in view, and with equally favorable results, administered creasote when flushing could not be resorted to.—*Lancet*.

#### BACTERIOLOGICAL NOTES.\*

The bacillus coli communis (Escherich) and the bacillus typhi abdominalis (Eberth) identical: Rodet and Roux (*Arch. de Med. Exper.* i, 1892, No. 3) have published the results of their further investigations concerning the identity of the bacillus of typhoid fever and the bacillus coli communis. After a large number of inoculation experiments with these bacilli they find that the lesions produced are the same. Rabbits inoculated with these bacilli exhibited the same variation in the temperature, and the development of the experimental disease is the same in both instances. The authors found that there was equally as much variation in the pathogenic effect of one of these forms as in the other when inoculated under different conditions. They feel warranted in concluding from the results obtained that the bacillus of typhoid fever is but a modified form of the bacillus coli communis and that the modification is brought about by pathogenic processes.

[These conclusions are of much interest from a hygienic standpoint and whether or not future investigations will verify them, the facts here recorded are sufficient to cause every practitioner to be zealous to the last degree in urging the correction of bad drainage and other irregularities by which the ordinary intestinal germs may be brought in contact with drinking water or food.]

The virulence of the bacillus coli communis: Lesage and Macaigne (*Arch. de Med. Exper.*, 1892, No. 3) have called attention to some very interesting facts concerning the pathogenic powers of the bacillus coli communis. This organism which is a normal inhabitant of the intestinal canal is found when taken from the healthy intestine to be non-pathogenic excepting when injected in very large doses (more than one cubic centimeter). A diseased condition of the intestine gave to the germ an acquired violence. A diarrhoea produced by a certain drug (tartar emetic) was as effective in rendering the coli germs pathogenic as when its disorder was brought about by other agencies. Under pathogenic conditions this bacillus coli communis acquires its power of penetrating the intestinal wall and at post-mortem

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they were found in the various organs of the body. This fact was demonstrated in cases of diarrhoea, cholera infantum, cholera morbus and typhoid fever.

In cases of lung trouble (pneumonia and broncho-pneumonia) the bacilli coli were found in the lung tissue. The author considers that the invasion takes place during the death agony.

The fact of practical value is that when these bacteria acquire violence they exhibit pathogenetic powers in varying degrees. Under such conditions they may cause suppuration, septicæmia and inflammation of the serous membranes. [This work like that of Rodet and Roux emphasizes the importance of proper drainage.]

The treatment of experimental tuberculosis by Koch's tuberculin, Hunter's modification and other products of the tubercle-bacillus: Trudeau (*Medical News* Sept. 3, 1892) has contributed to medical knowledge the results of his experiments with Koch's tuberculin. Hunter's modifications, filtered culture-medium and bacterio-protein. Twelve guinea-pigs were inoculated with pure cultures of tubercle-bacilli. Four were kept as controls, the remainder treated with subcutaneous injections of Koch's crude tuberculin beginning with one milligram daily and steadily increasing to one cubic centimeter. Care was necessary in order not to kill the animals with an over-dose during treatment. The animals all died. The controls in an average of eighty-eight days, the others with an average of one hundred and twelve days. This result differs but little from that of a large number of European investigators. He concludes that Koch's tuberculin does not cure experimental tuberculosis in a guinea-pig although its specific influence on the primary lesions is indisputable. His results with Hunter's modifications led to the conclusion that the modification C. B. (Hunter proposed two modifications which he designates merely as B. and C. B. both of which bring about in lupus certain reparative changes tending to cure) contains less of the remedial principle than tuberculin, and is apparently quite as dangerous. Modification B is as efficacious as tuberculin, and free from some of its dangers.

The author's work upon the effect of the filtrate of liquid cultures and the glycerine extract of the washed bacilli is very interesting. His results show that tuber-

cle bacilli (which have been deprived of all culture liquid by washing them in masses on filter paper with tepid water) have, when extracted with 50 per cent. glycerine and water, an injurious effect; when treated with hot alcohol, a doubtful, and, at best, feeble remedial influence over experimental tuberculosis. They produce suppuration and serious constitutional impairment, which may result in organic disease and death. The filtrate of liquid cultures contains the elements that bring about reaction and cure in tuberculous tissue injections of it experimental tuberculosis in a rabbit's eye was cured but the permanency of such a cure has not yet been established.

A simple method of demonstrating the presence of tubercle bacilli in sputum: Kaufmann (*Centralblatt f. Bacteriologie u. Parasitenkunde*, Bd. 11, 1892, p. 142) has published a new method for demonstrating the presence of tubercle bacilli in sputum and tissues. Although the number of methods is already very large the author ventures this one on account of its simplicity which renders it of special value for the busy practitioner. The method differs from those of Wilson, Gabbet and others, in the use of boiling water instead of acids for decolorizing the tissue cells and other bacteria. The method is as follows:

Cover-glasses are smeared with a very thin layer of the sputum or suspected material and allowed to dry in the air, after which they are passed three times film upward through the flame of a Bunsen burner or spirit lamp. The film is then covered with carbolfuchsin and heated in the usual manner over a flame or the cover-glass is floated on the surface of the hot staining fluid in a water glass for from 2 to 5 minutes. After staining, the preparation is washed in water heated to from 98-100° C. for from 1-3 minutes. The preparation may be examined at once in water or previously counter-stained as the examiner desires, the tubercle bacilli will be found to be of a deep red and the tissue cells of a grayish-white color. Care must be taken that the film on the cover-glass is very thin. The method is said to be quite as good for sections. The author does not recommend this method for laboratories but for physicians who do not have the facilities for applying the other methods. The method has also been found to work satisfactorily with the bacillus of leprosy. V. A. M.

## HEREDITARY INFECTION.

Translated for THE MEDICAL AND SURGICAL REPORTER by Marie B. Werner, M. D.

Dohrn (*Deutsch. Med. Wochen.* Sept. 15, 1892) in a paper on "The Question of Hereditary Infection," states, that he has been much interested in the communications of Caspary regarding Fournier's writings, which awakened a desire to enter into the consideration of the above question from the obstetrician's standpoint. He admits that his observations may be deficient, but viewing the subject from a different standpoint than Caspary, he bases his results upon practical and microscopical investigations. Dohrn sees the patients in the last stages of pregnancy, and the first weeks of the puerperium; he sees and watches the new-born child in the early weeks of its life. The information regarding the health of the father may often be very unsatisfactory. The syphilologist has on the other hand the patient under his care a much longer time, and if he happens to be the family physician has an opportunity of knowing more of the previous family history. He, however, fails to have the opportunity of observing the new-born child, as well as the study of the placenta and its membranes, upon which Dohrn places great importance. There is also a lack of opportunity to study the products of abortions of syphilitics. He further believes if the line of study was more equal with both, the conclusions would not be so widely different, Caspary emphatically reaffirms the statement of other syphilologists that the placenta is a medium of infection, while Dohrn takes the opposite view with that of other gynecologists and of Krassowitz the syphilologist.

To prove this he advises careful study of the placenta which shows the two distinct sets of blood vessels the maternal and foetal, both so distinctly separated that it is impossible to have a direct interchange of the blood, and since all studies have led to the fact that it becomes necessary to have immediate contact with the poison, that there is always a previous abrasion of the protecting membrane or integument, the question naturally arises how can infection take place through the dividing membranes; To fortify this statement Dohrn asserts that in leukaemia of the mother the foetal blood has been found

free from the disease. In such cases he found the foetal side of the placenta diseased, while the maternal portion was healthy; he explains this in the following manner: In large maternities, such material is not meagre, the women having often cohabited with different men; after having first become impregnated from a healthy man, they have been infected by a syphilitic. Such a foetus remains unaffected by a syphilitic mother because the fecundated ovum was healthy. On the other hand syphilologists claim that a foetus may be syphilitic while the mother is free from infection; this is explained by Fournier by a minimal absorption of the poison through the placental membranes, thus producing a certain tolerance, minus the primary initial lesions. Dohrn, however, doubts this, and thinks there is but one explanation, the primary lesion must have been overlooked, in the mother which may have existed on cervix or post-vaginal wall. Dohrn closes his remarks with the following conclusions: Syphilis can only be communicated to the foetus through the products of conception, the ovum and sperma being of equal importance.

If the ovum is healthy at conception it will remain unaffected by any later infection of the mother. The syphilitic ovum will not infect the mother during intrauterine life.—If the mother becomes syphilitic it will be only by direct infection; he heartily endorses the statement of Krassowitz that the syphilitic poison will not pass the healthy dividing placental membrane either from foetus to mother or from mother to foetus.

Cattani, (*Riforma Med.*, 1892, June 21), the assistant of Tizzoni, recommends the use of *antitoxin for tetanus* and calls attention to the unfortunate results of traumatic tetanus. Dupuytren and Cloquet—fifty cases no recoveries, all died. Legonest twenty-three cases with twenty-one deaths. In the United States 360 cases with 336 deaths. In the Italian Hospital (1886 to 1887) there were ninety cases with eighty deaths, in earlier years eighty-six cases with eighty deaths.

Those cases treated with antitoxin were often grave in character, but also chronic continuous but lighter cases were spoken of by the authors as having ended fatally.

Those cases treated in addition with chloral hydrate, the drug was given in too small doses to produce desired effects. In addition to Cattani's and Tizzoni's recoveries, those of the clinic at Innsbruck must be regarded impartially—the fatal case was placed too late under treatment and received two injections, further, antitoxin is not only regarded as infallible, but its use in early stages always tends to give relief. Antitoxin derived from the serum of the guinea-pig can be used with equally good results as that derived from the dog—proved by the good results of an as yet unpublished case. The divergent results of Brieger and Kitasato among animals can be explained by the unequal strength of the fluids used.

#### AN ANATOMICAL CRITERION TO DISTINGUISH MALE FROM FEMALE SKULLS.

Prof. Virchow declared two years ago that all the alleged modes of differentiation so far recommended were worthless, but Dr. Thiem-Cottbus (*Arch. f. Klinische Chirurgie*, Bd. 37) lately described what seems a satisfactory craniological criterion of sex.

The os tympanicum forms part of the posterior wall of the glenoid cavity of the inferior maxillary, and also closes in front and below the bony meatus of the ear. It arises perpendicularly from the petrous portion of the temporal bone posteriorly, and turns backward, in the woman at about half the height of the mastoid process, but in the man at a less height. In the male, the bone develops a sharp edge, which divides to form the sheath of the styloid process; but in woman this sharp-edged edge does not exist, the bone is rounded into a tubercular form, and the fossa is shallower and flatter.

Thus, in the male this fossa-tympanico stylo-mastoidea is small, and the posterior wall of the glenoid cavity extends so deep that it is not possible for the condyloid process to slip over it. In the female, it is so much more spacious that this feature alone will serve to distinguish the crania of one sex from the other; and it also explains the surgical fact that luxation backward of the inferior maxillary is observed only in women.—*Science*.

#### Abstracts.

##### CALOMEL AS A DIURETIC.

In an article in the *Ohio Medical Journal*, on the above subject Saul Nickles says that the use of calomel as a diuretic, was revived by Jendrassik. Lately, nearly all the works on therapeutics state that calomel has been found to be a powerful diuretic in dropsy, but their descriptions of the method of using were imperfect. Jendrassik, in a case of dropsy, gave calomel and jalap and found diuresis followed in two days, greatly relieving the patient. This led to other trials with equally good results. In a very severe case of cardiac dropsy digitalis failed to relieve; Jendrassik then gave calomel and jalap, of each four grains twice daily, four grains on second day, two grains on third day and three grains on fourth day.

The quantity of urine increased from thirty ounces to over ten pints, profuse diuresis continuing until dropsy disappeared.

Jendrassik, then used it in twenty-four cases each of which was relieved, polyuria beginning about the second or third day. He found that salivation was not liable to be produced. Jendrassik tried calomel in healthy individuals; stomatitis and salivation resulted, but no increase of urine; Stintzing used calomel in twenty-seven cases of which twenty-three were dropsical. He concludes that calomel acts more powerful than all other diuretics; its diuretic action is manifested slightly in patients without œdema, but in a very high degree, in cases of dropsy.

The effects are found in cardiac dropsy, whether this be the consequence of valvular disease or cardiac degeneration. Ascites, caused by portal obstruction and dropsy caused by chronic parenchymatous nephritis are less amenable to the action of calomel. The incidental effects diarrhœa, salivation and stomatitis may be prevented, or rendered harmless by suitable prophylactic means. The best dosage recommended by Jendrassik is three grains daily, which should be continued, at least three days. If dropsy does not disappear treatment may be resumed.

Nothnagel, also, tried calomel in numerous cases of dropsy, and found it to be very effective.

Opinions differ as to the mode of action



of calomel. Jendrassik supposed that it increased the resorption of the dropsical fluid, by the blood, and that calomel, does not act like digitalis by increasing the blood pressure.

Stintzing and some others hold that calomel acts directly upon the kidneys, because they found some increase of urine in patients not affected with dropsy. Cohnstein also holds this view.

#### ÆTIOLOGY OF DIPHTHERIA.

Wilson in the *Indiana Medical Journal* having given special attention to the above subject, arrives at the following conclusions. Diphtheria is caused by a specific germ. It is an acute infectious disease, the bacillus being transmitted from the body in particles of diphtheritic exudation, saliva, and ether secretions of the body. Also, that the poison may be transmitted by direct contact, by inoculation and by inspired air.

The most frequent mode of infection is by contact, with infected substances. The conditions which most favor the development of diphtheria are damp, cold localities, sudden changes of temperature, bad hygiene, depressing influences, and age.

The germs may be found in the mold on the wall paper and in foul, damp places for months after the disease has been present.

He also mentions that animals and fowls may convey the disease.

#### REPORT OF ONE THOUSAND CASES OF LABOR, WITHOUT A DEATH.

The *Columbus Med. Jour.* publishes the results obtained at the Preston Retreat, Philadelphia, by Dr. Joseph Price. In this series of cases, there were a number of complicated cases which were successfully dealt with, both as regards mother and child. The patients were admitted two weeks before labor and remained four weeks after. On admission they are given a bath, laxative and clean clothing. Until labor begins, two soap-baths are given weekly, bowels kept loose and kidneys are watched. When symptoms of labor begin, a thorough bath is given, an enema is administered, and the vagina douched with a 1-2000 bichloride solution, clean clothing is then applied, and patient put in room for delivery, both

nurse and physician make careful toilets and, as a rule, only one examination is made. Only in complicated cases, are repeated examinations made. Only two douches are given, one before labor and one after. In the final douche some of the fluid is thrown over the thighs and external genitals, then a pad is applied, which is changed from four to six times daily. The mothers as a rule nurse their children. They remain in bed usually about eleven days. The infantile mortality is low.

#### A CASE OF HEALED TUBERCULOSIS WITH AUTOPSY.

Dr. Albert Abrams, in *Occidental Medical Times*, reports the following case—E. I. aet. 27 showed on examination, evidences of cavity formation and consolidation of both pulmonary apices. There was also dilatation of both ventricles of the heart; irregular and rapid heart action. The sputa contained a very large number of tubercle bacilli.

The diagnosis, pulmonary tuberculosis. The patient was given creosote internally, in drop doses, and increased until a drachm was taken daily.

The pneumatic cabinet was also used daily. There was a gain of twenty-eight pounds in weight in four months. The sputa disappeared and bacilli were no longer recognizable. He then passed from observation and died six months later. The thoracic viscera were examined. The pleura over the apices showed cicatrices, which corresponded with the cavities, the size of walnuts in both apices. The left lung was much retracted, adherent and showed the appearance of interstitial phthisis.

The anatomical diagnosis was "Healed tuberculosis."

He cites this case, to show the value of creosote, in cases where the sputa is full of bacilli.

#### INJECTION FOR THE TREATMENT OF TUBERCULOSIS OF THE BLADDER.

Dr. Petit (*La Semaine Médicale*, No. 11, 1892) praises the following as an injection in the treatment of tuberculosis of the bladder:

**R** Iodoform ..... grs. 30.  
Glycerine ..... grs. 10.  
Distilled water ..... grs. 2.  
Gum tragacanth ..... cgms. 30.

## Selected Formulæ.

## LOCAL ANÆSTHESIA OF THE BLADDER.

To produce local anæsthesia of the bladder inject the following:

**R** Aq. fontan. dist. .... ʒjss.  
Cocain. murat. .... gr. v-ix.  
Sig.—Sufficient for one injection.

—*Il Raccoglitore Medico.*

## PRESCRIPTIONS FOR ECZEMA.

Cases of acute eczema should not be treated by liquids, but by powders, according to *L'Union Médicale* of March 29, 1892. The following powder may be used where there is acute inflammation:

**R** Oxide of zinc ..... ʒss.  
Subnitrate of bismuth ..... ʒss.  
Talc ..... ʒss.

In the treatment of chronic eczema it is often wise to commence with ointments of zinc, such as follows:

**R** Oxide of zinc ..... gr. xxx.  
Vaseline ..... ʒvi.

Or the following may be employed if the first is not sufficiently active:

**R** Calomel ..... from gr. vii to ʒi.  
Oxide of zinc ..... gr. xv to ʒi.  
Vaseline ..... ʒvi. M.

In cases which are unusually rebellious, as in the case of those eczemas which are in folds of the body, the following may be employed:

**R** Yellow precipitate ..... gr. xv.  
Pure oil of cade. .... gr. xv to ʒi.  
Vaseline ..... ʒvi. M.

This ointment is very active, and is harmful if employed in regions where it can produce folliculitis around hair-follicles, in which case the following may be employed:

**R** Sulphur ..... gr. xv.  
Coca-butter ..... ʒi.  
Castor oil ..... ʒi. M.  
Sig.—A small quantity of naphthol or camphor may be added to this.

In those eczemas with abundant desquamation, the following prescription is useful:

**R** Salicylic acid ..... gr. xv.  
Oxide of zinc ..... gr. xxx.  
Vaseline ..... gr. xxx.

When pruriginous eczema is present, the following is useful, as it protects the parts:

**R** Oxide of zinc .....  
Vaseline, equal parts.....

It may be well to incorporate with these substances, if pruritus is present, a little oil of peppermint or carbolic acid, in the proportion of 1 to 4.—*Ther. Gaz.*

## IRITIS.

In certain cases of very painful iritis one may use the following:

**R** Aq. destillat. .... gms. 10.  
Cocain. hydrochlorat. .... gms. 30.  
Homatropin. hydrobromat. .... gms. 30.

Homatropine used alone acts as an irritant and causes a profuse secretion of tears and peri-corneal hyperæmia; the use of cocaine diminishes these phenomena.

## A POWDER FOR CORYZA.

**R** Naphthaline in an impalpable powder, ʒvi.  
Powdered boric acid ..... ʒvi.  
Powdered camphor ..... gr. xv.  
Extract of violets ..... gr. xv.  
Essence of roses ..... ʒt. xx.

Sig.—Mix and use as a snuff in coryza.

—*L'Union Médicale.*

## LOCAL ANÆSTHESIA MIXTURE.

The following (*Lo Sperimentale*, No. 18, 1891) is given:

**R** Ether ..... gms. 75.  
Acid carbolic ..... gms. 30.  
For external use. Spray on the part to be anesthetized.

## BRONCHO-PNEUMONIA.

*L'Union Médicale* for March 24, 1892, gives the following prescription for the treatment of broncho-pneumonia of children in the later stages:

**R** Brandy ..... ʒss to ʒi.  
Quinine sulphate ..... gr. x.  
Syrup of orange ..... ʒss.  
Peppermint-water ..... ʒi. M.  
Sig.—Give 6 to 10 coffeespoonfuls of this mixture to a child each day.

## INFANTILE DYSPEPSIA.

**R** Cascarella Tincture ..... 2 grammes.  
Rhubarb Tincture ..... 4 "  
Bitter-orange-peel Tincture ..... of each, 8 "  
Gentian Tincture ..... 8 "  
Nux-vomica Tincture ..... 8 "

For a child of seven, 10-15 drops in water, after meals.

—*Simon.*

## HOW TO ADMINISTER THE ETHEREAL EXTRACT OF MALE FERN.

Dr. Crequy (*Lo Sperimentale*, No. 4, 1892) prescribes the ethereal extract of male fern as follows:

**R** Ethereal extract male fern ..... gms. 5.  
Calomel ..... gms. 8.  
Sufficient for fourteen capsules. Two capsules every ten minutes.

This prescription is based upon the fact that the active and toxic principle of the male fern is soluble in fatty oils. Hence castor oil, the common purgative after male fern, should be avoided in the expulsion of tænia by this drug.

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THE MEDICAL AND SURGICAL REPORTER.

SATURDAY, OCTOBER 15TH, 1892.

TAPE-WORMS.

A review of a certain French article on the tape-worms of man, which is now going the rounds of the medical journals, deserves a word of correction. The review states that a French scientist, M. Colin, has recently discovered that the tape-worm which man obtains from beef is identical with the tape-worm obtained from pork and that it is impossible to determine whether a person has become infected from pork or from beef, even by a careful study of the parasite passed by the patient.

These statements, however, are totally false and it seems almost impossible that medical journals should give any credence to such claims, when zoologists

have worked the matter out so carefully and have given us so many characteristics by which we can distinguish between the two forms.

The two species in question are known to medical zoologists under the name of *Tænia saginata* ("the beef-measle tape-worm") and *Tænia solium* ("the pork-measle tape-worm.")

The beef-measle tape-worm is contracted by eating the larva (so-called *Cysticercus bovis*) which is found in the muscles of beef, especially in the muscles of the jaws and tongue. The head of this parasite is provided with four suckers but bears no hooks. If a mature segment of the worm is compressed between two glass slides and held up to the light, the uterus will be distinguished in the form of a straight stem running longitudinally and giving off numerous (15-30) branches on each side.

The pork-measle tape-worm on the other hand possesses two circular rows of small hooks on the crown of the head, as well as four suckers, similar to those found in the beef-measle worm. Upon compressing a segment between two glass slides it will be seen that the uterus possesses but 8-12 branches on each side.

With the aid of a microscope it is also possible to notice distinct differences in the size and shape of the eggs produced by the two worms.

The statement that M. Colin claims that both hogs and cattle are infested by the same species of larva is easily explained.

Under normal circumstances, the larvæ found in the muscles of hogs, possess the double row of hooks on the head. Occasionally, however, the hooks fall off and a larva is obtained which resembles very closely the larvæ found in beef, which as stated above, are never armed with hooks. M. Colin evidently had one or more of these degenerated larvæ before him when he made his statement that the two forms were identical,



It may possibly occur to some physicians that it is immaterial whether a man has the beef-worm or the pork-worm; but such is not the case, since the pork-worm is much more dangerous than the beef-worm. If a patient harbors the armed form he is not only subjected to the inconveniences arising from the presence of a parasite in his digestive tract, but he is constantly in danger of re-infecting himself with the eggs of the worm. The eggs of the parasites are present in the feces and may, by various means, be transferred to his food and thus to his mouth. Upon arriving in his stomach the egg-shell is destroyed and a six-hooked embryo is set free. This embryo then bores its way through the intestinal wall and wanders to some muscle, to the inside of the eye or even to the brain, and develops into the larval form (*Cysticercus cellulosæ*) the same as it would do in the muscles of hogs.

The embryo of the beef-measle worm, on the other hand, cannot develop into a *Cysticercus* in the human muscles, and a man may swallow any number of the eggs with perfect impunity.

From this it will be seen that the physician should know whether his patient harbors the beef-worm or the pork-worm. If the latter is present, it should be removed immediately in order to prevent infection with the larvæ; further, if this worm is passed, the physician should be very careful in handling it as he may infect himself with the ova. The other worm, however, can be handled without fear of infection.

The infection of human muscles by *Cysticercus cellulosæ* (pork-measles) is not at all uncommon in Europe, but fortunately it is very rare in this country, since the adult parasite itself is of rare occurrence in America.

The tapeworm which is most frequently found in America is *Tania saginata*.

These two species are not the only tapeworms found in man. *Bothriocephalus*

*latus* (the broad Russian tape-worm) is obtained from fish. This parasite is very frequent in Russia, but has been recorded only four or five times in this country. *Bothriocephalus cordatus* and *Bothriocephalus liguloides* are two other species which are supposed to come from eating larvæ in the muscles of fish. *Hymenolepis nana* is an extremely small tape-worm which is quite frequent in Italy, but has been recorded but twice in the United States. *Hymenolepis diminuta* (*Tania flavo-punctata*) is a small tape-worm of rats, which is occasionally found in men. *Dypilidium caninum* (*Tania cucumerina*) is a common tape-worm of dogs, which is now and then found in children. The larval stage of this worm lives in the fleas of dogs, and children become infected with the parasite by swallowing, consciously or unconsciously, fleas containing the larvæ.

The presence of a tape-worm can be definitely diagnosed by finding the loose segments in the stools, but if any doubts exist as to the presence of the parasites, any expert microscopist can settle the question by a microscopical examination of the feces.

#### EXOPHTHALMIC GOITRE.

In a case of exophthalmic goitre, Diefenbach gave the following prescription, as there was a distinct tendency to hæmoptysis:

**R** Powdered ipecac.....gr. ½.  
Powdered digitalis-leaves.....gr. ½.  
Extract of opium.....gr. 1-10. M.  
Sig.—To be made into one pill. From four to six of these pills may be given in twenty-four hours.

The effect of this medication is a decided moderation in the symptoms and general improvement in the condition of the patient. Should diarrhoea follow the administration of ipecac in these constant doses it may be guarded by increased doses of opium.

#### CHAPPED HANDS.

##### WASH.

**R** Green soap.....1 part.  
Compound Benzoin Tincture.....4 parts.  
Glycerin.....8  
Rose Water.....16  
—Wendel.

## Book Reviews.

**R. Blanchard.** Sur les Œstrides Américaines dont la larve vit dans la peau de l'Homme (Ann. d. l. Soc. entomol. d. France, 1892. pp. 109-154).

Blanchard has brought together a large number of cases of œstrus-larvæ, found under the skin of man; he further figures and describes ten larvæ in his possession which were taken from man. His general conclusions are that four American species of Œstrides belonging to the genus *Dermatobia* attack man, but all of these are found in animals as well, so that we have no right to speak of the species *Dermatobia* (or *Œstrus*) *hominis*.

The four species in question have been described under the names:

1. Ver macaque—*Dermatobia noxialis*.
2. Torcel—*D. sp. (?)*
3. Berne—*D. cyaniventris*.
4. Ver moyocuil—*D. p. (?)*

### BOOKS RECEIVED.

*Contributions of Physicians to English and American Literature*, by ROBERT C. KENNER, M. D., The Physician's Leisure Library, Geo. S. Davis, Publisher, Detroit, Mich. Price 25 cents.

*Cardiac Outlines For Clinical Clerks and Practitioners and First Principles in the Physical Examination of the Heart, for the Beginner*, by WILLIAM EWART, M. D. Cantab, F. R. C. P., Physician to St. George's Hospital; Clinical Lecturer and teacher of Practical Medicine in the Medical School; Physician to the Belgrave Hospital for Children; Additional Examiner in 1891, for the third M. B. of the University of Cambridge; Late assistant Physician and Pathologist to the Brompton Hospital for Consumption and Diseases of the Chest. With sixty-two illustrations. New York: G. P. Putnam's Sons.

*Hydrotherapy at Saratoga*, a treatise on natural mineral waters, by J. A. IRWIN, M. A., Cambridge, Eng.; M. A., M. D., Dublin University; L. M. Coll. of Physicians, Ire.; Member of the Royal College of Surgeons, Eng.; Member of the British Medical Association; Fellow of the London Obstetrical Society and the New York Academy of Medicine, etc.; formerly house surgeon, Royal Free Hospital, London; Shropshire and Montgomeryshire Counties Lunatic Asylum, and Physician to the Manchester Southern Hospital for Women and Children. New York: Cassell Publishing Company.

*A Manual of the Operations of Surgery for the use of Senior Students, House Surgeons and Junior Practitioners*; illustrated, by JOSEPH BELL, M. D., F. R. C. S. Edin., Consulting Surgeon to the Royal Infirmary and Surgeon to the Royal Edinburgh Hospital for Sick Children. Seventh Edition, Revised and Enlarged. Edinburgh: Oliver and Boyd, Tweeddale Court, London: Simpkin, Marshall, Hamilton, Kent & Co., Limited, 1892.

*Essentials of Diagnosis* arranged in the form of questions and answers, prepared especially for students of medicine, by SOLOMON SOLIS-COHEN, M. D., Professor of Clinical Medicine and Applied Therapeu-

tics in the Philadelphia Polyclinic; one of the physicians to the Philadelphia Hospital, etc., and AUGUSTUS A. ESSENER, M. D., Instructor in Clinical Medicine in Jefferson Medical College, and in the Philadelphia Polyclinic; Registrar in the Neurological department of the Philadelphia Hospital, etc. With fifty-five illustrations some of which are colored, and a frontispiece. Price \$1.50 net. Philadelphia: W. B. Saunders, 913 Walnut St., 1892.

*Temperament, Disease and Health*, by FRENCH EMMES CHADWICK, Commander U. S. N. New York: G. P. Putnam's Sons.

*Book on the Physician Himself*, and things that concern his reputation and success, by D. W. CATHELL, M. D. New Tenth Edition (Author's Last Revision). Thoroughly Revised, enlarged, and rewritten. In one handsome Royal Octavo volume. 348 pages. Bound in Extra Cloth. Price, post-paid, \$2.00, net. Philadelphia: The F. A. Davis Co., Publishers, 1231 Filbert Street.

*The Medical and Dental Register—Directory and Intelligence of Pennsylvania, New Jersey and Delaware* (1892 Edition), pp. 424; price, by mail, \$1.25. George Kell, Publisher, 306 Chestnut Street, Philadelphia.

## Periscope.

### THERAPEUTICS.

#### THE TREATMENT OF MIGRAINE.

Dr. Savigny believes that the etiological conditions must be considered. Those predisposed to this disease are the neuropathics, gout, rheumatics, diabetics, and anæmics. Constipation is an important adjuvant condition. The use of narcotics (morphine hypodermatically) is objectionable, in that it causes vomiting, is only palliative and not curative, and increases the constipation. Chloral only fulfils a symptomatic indication. The analgesics, salicylic acid, antipyrine, exalgine, acetanilide, and indeed sulphate of quinine, yield cures, but often relapses quickly follow.

Haig, believing that in gouty subjects there is a connection between this and an increased excretion of uric acid, uses large doses of citric or nitro-muriatic acid. He believes that antipyrine acts in the same way. A nitrogenous diet, meat, cheese, and beer, should be forbidden. By its chemical acid the good effects of chloride of soda are explained (Batom, Nothnagel, Rabod;) this, however, has been useless if there exists a gastralgia. The treatment between the attacks may be the reduction of obesity (method of Oertel), hydrotherapy, total rest, physical and intellectual, before a cold bath, with physical exercise afterward, or if the bath is a hot one, followed by rest (procedure of Pelezus). For the attack itself, Dunn has used co-

caine hypodermatically, although it often causes insomnia, agitation, exaggerated reflexes, rapid pulse, palpitation. Rossbach believes in the value of local massage. Neffel uses hot water to increase transpiration, muscular exercise, improvement of the general condition. Morris Lewis uses ten drops of the tincture of eucalyptus four to six times daily, while Gill Wylie has prescribed with success a grain of ox-gall and a drop of essence of gaultheria six times daily. The author employs caffeine and bromide of ammonium in peppermint water, every two hours during the attack, recommending, in addition, electricity, either static or galvanic, with general faradization.—*Revue de Thérapeutique Médico-Chirurgicale*, 1892, No. 4, p. 94.

#### STRONTIUM SALTS IN BRIGHT'S DISEASE

At a recent meeting of the Therapeutical Society, M. Constantin Paul reported on the use of strontium lactate in the treatment of albuminuria. The lactate is the salt preferred, and it is made by dissolving strontium hydrate in lactic acid, sufficient water being added to assist solution, which should be brought to a state of neutrality by adding the strontium hydrate to saturation. The pure lactate (which gives no precipitate with potassium chromate) has been given in daily doses up to 8 or 10 grammes to adult males without danger. Although not diuretic, it diminishes the quantity of albumin and generally ameliorates the symptoms. This has been specially noted in rheumatic parenchymatous nephritis, in the albuminuria of gouty or scrofulous subjects, scarlatina patients, and that which is common before and after confinement. Headed that the best time to begin the administration of strontium lactate is when the secretion of urine is scanty and there is a tendency to uræmia. In the course of the discussion Dr. Dujardin-Beaumetz stated that the bromide of strontium was more easily supported by the stomach than other alkaline bromides. M. Patein stated that yellow chromate precipitates 1 milligramme of chloride of barium in 20 grammes of water, but it also precipitates salts of strontium when they are not in a very weak solution, hence errors might arise. Bichromate of potash, on the contrary, will detect a solution of 100 grammes of a salt of barium, but does not affect strontium salts. The method of

procedure which he suggested was to make a saturated solution of the salt and add two or three drops of bichromate solution; the liquid should remain clear even after twenty-four hours. Or, make a weak solution of the strontium salt and add two or three drops of solution of neutral chromate; the liquid should remain clear for some minutes. M. Patein added that he found the salts of strontium sold to be generally impure. Dr. Dujardin-Beaumetz expressed his pleasure at this statement; the tests he considered to be very important.

#### A CHEAP DISINFECTANT.

Nitrate of lead is the cheapest disinfectant known that fulfils its intent. It does not, however, prevent putrefaction. The chloride of lead is much more effective in all directions. It is made by dissolving a small teaspoonful of the nitrate of lead in a pint of boiling water; then dissolving two teaspoons of common salt in eight quarts of water.

When both are thoroughly dissolved mix the solutions. When the sediments has settled you have two gallons of clear fluid, which is a saturated solution of chloride of lead in water. A pound of nitrate of lead will make several barrels of the liquid and cost from eighteen to twenty-five cents retail.—*Annals of Hygiene*,

#### PYRAZOLE.

H. Tappeiner (*Centralblatt für klinische Medizin*, No. 46.) has found that this substance possesses peculiar properties which may be used to advantage in certain forms of nervous disease. Given in large doses it is a paralyzer of the nervous centre. As a heart stimulant its action is prompt. That it is an excitant of the secretory apparatus of the kidney is shown by the active diuresis following its administration. Aside from these conditions produced by pyrazole, the physiological action is very similar to that of antipyrine. The dose is from one-half grams. No nausea, vomiting or other unpleasant sensations have been observed to follow its employment.

#### ATROPINE AS A HEMOSTATIC.

Dmitrieff (*Wratsch*, 1891, No. 50) reports the successful employment of atropine as a hemostatic in two cases of metrorrhagia. In one case the hemorrhage per-



sisted, despite the employment of the usual remedies, including the tampon; but ceased after injections each of gr.  $\frac{1}{4}$  of atropine. The second case occurred in an anæmic woman, who became syncopal, with cold extremities. The first injection was followed by improvement, and the third by cessation of the bleeding. In both cases the pupils were slightly dilated.—*Wiener medicin Presse*, 1892, No. 16, p. 639.

#### METHYL-VIOLET IN MALIGNANT TUMORS.

Nanu has obtained very good results in ten out of twenty-five cases of malignant tumors by injecting methyl-violet according to the system of Von Moorhof. The diagnoses were confirmed by microscopic examination. On the other hand, Torrie after a trial of this method in several cases came to the conclusion that it is never of any benefit and may be harmful.

#### SULPHUR IN CHLOROSIS.

Professor Schultz again draws attention to the value of sulphur in certain cases of anæmia. After alluding to the prominent part played by sulphur in the life of the cell—a part analogous to that of hæmoglobin in the blood—and to the excellent results obtained by the use of sulphur waters in malarial cachexia, he comes to these conclusions:—(1) In cases of pure chlorosis in which the iron proves inefficient, the general condition is decidedly improved by sulphur; (2) after the administration of sulphur has gone on for some time, treatment with iron can be commenced and continued with success; (3) in cases of chlorosis complicated with catarrhal and inflammatory conditions of the digestive tract, sulphur is not borne. Schultz relates a case illustrating the advantage of the sulphur treatment. The patient, a woman 34 years of age, showed an extreme degree of anæmia, and had loud cardiac bruits. She complained of headache, giddiness, shortness of breath, palpitation, and complete loss of appetite, with pain in the epigastrium after food. Rest in bed with bland fluid diet was ordered, and this—with bismuth and morphine and occasional doses of Carlsbad salt—relieved the gastric pain. Iron was tried in the form of the saccharated carbonate, but vomiting immediately set in,

and it had to be discontinued. Other preparations of iron were tried with no better result. Sulphur was accordingly given, and this she bore very well. Great improvement ensued; the anæmic appearance lessened, and the headaches and palpitation disappeared. She was discharged from hospital greatly bettered; but she still complained of some palpitation on exertion. Iron was again given as the saccharated carbonate, and this time was tolerated without difficulty. The sulphur was used in the form of flowers of sulphur mixed with sugar of milk, as much being taken three times a day as would lie on the point of a knife.—*Berliner klin. Wochenschr.*, No. 13, 1892.

#### LUECKE'S METHOD OF TREATING ERYSIPELAS.

Winkler (*Wiener med. Wochenschrift*, No. 46-48, 1891) writes that the method of Luecke consists of the application of rectified oil of turpentine with a brush or small compress with stroking movements from the healthy toward the diseased portion several times daily; the séances should not exceed five in the twenty-four. In the after-treatment following each séance, the parts are covered by cotton wadding held in place by a bandage. The parts are thoroughly cleansed in the beginning with ether or alcohol. Excoriations are covered with sublimated lanolin. Twenty-two cases are reported, showing an average of five days elapsing between the first application and the desquamation marking the subsidence of the disease. The benefit derived is said by the author to depend upon the ozone present in the oil of turpentine.

#### TREATMENT OF ENTERIC FEVER.

Mason (*Boston Med. and Surg. Jour.*, Nos. 14 and 15, 1892), has published a report on 676 consecutive cases treated in the Boston City Hospital. Favorable results were obtained from the use of hydronaphthol, though relapses were not prevented. In a series of 103 consecutive cases, forty-five were treated with hydronaphthol and fifty-eight without. In twenty-seven of the forty-five cases diarrhoea diminished or ceased, but in some this effect was not produced for two weeks. Four cases relapsed, and two died. Of the fifty-eight treated without hydro-

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naphthol, six relapsed and seven died. Hemorrhage from the bowel did not occur in any cases treated with hydronaphthol, but did occur in three of the others. In the hope of preventing relapse, thirty cases were treated with the drug at first every two hours, later every four or six hours, from the time of the admission until convalescence was well established. Two cases, however, did relapse, and one died with symptoms of perforation. From a comparison of his statistics (876 cases) with Hare's (1173), Mason arrives at the conclusion that the general mortality might be reduced two per cent. by the systematic use of cold baths, and that this diminution would be effected mainly by a decrease in the number of deaths among women. Women offer a feebleness of resistance to pyrexial exhaustion, and it is in preventing this exhaustion that the bath method has its chief effect.—*Brit. Med. Jour.*

#### HÆMOSTATIC VALUE OF SHEPHERD'S PURSE.

This has been known for a long time, but was temporarily lost sight of. The drug has, however, been resurrected, and much testimony as to its efficiency in uterine bleeding is being adduced. Shepherd's purse loses much of its efficacy in drying, so that only the fresh herb or a fluid extract prepared from the latter should be employed. As a styptic Von Oefele considers this fully equal to hydrastis, with the advantage of cheapness and absence of bitter taste. A single dose of the green fluid extract should not exceed fifteen grams, the maxim total dose for twenty-four hours being thirty grams.

#### MEDICINE.

##### PARALYSIS OF THE BRACHIAL MUSCULO-CUTANEOUS NERVE.

Windscheid describes (*Neurol. Centralbl.*), the case of a man who noticed a sensation of numbness in his right thumb and part of the front of the forearm, with partial inability to bend the elbow, a few hours after carrying a heavy marble slab on his right shoulder, a sharp edge of the slab having pressed deeply into the supraclavicular fossa. At examination a fortnight later the forearm could be voluntarily flexed, but, when bent, the

biceps remained flaccid and uncontracted; numbness and formication were felt in the volar portion of the thumb and the radial side of the fore-arm; in the same regions analgesia was almost complete, though contact impressions were fairly well perceived; there was no ordinary reaction of degeneration. Indirect faradic stimulation of the affected biceps elicited "Rumpf's traumatic reaction" very clearly. On cessation of the tetanizing current a wave of short contractions appeared in the muscle. This phenomenon was discovered by Rumpf in cases of traumatic neurosis, and was considered by him to be an important objective indication of that affection. He observed it in various nerve territories besides that of the nerve primarily excited. In Windscheid's case it was limited to the biceps, and was not obtained on direct stimulation of the muscle. The sign, in Windscheid's opinion, has not the value accorded it by Rumpf; it partially resembles Ritter's opening tetanus. In the case above referred to it could only be regarded as an indication of increased excitability of the nerve below the injury. After three months treatment with electricity the biceps contracted well, the sensory disorders were diminished, and Rumpf's reaction was less distinct.—*Brit. Med. Jour.*

#### CEREBRAL SYPHILIS.

Cnopf (*Münch. Med. Woch.*, March 15th, 1892) relates the case of an infant, thirteen weeks old, which, in addition to the ordinary symptoms of intestinal catarrh and atrophy, had severe attacks of pain, during which the neck and back muscles became rigid. Eight days before death there were convulsions. At the necropsy there was a circumscribed greyish-red gelatinous mass in each corpus striatum. On the left side the centre was yellow and breaking down. The occipital lobes were sclerosed. There was external and internal hydrocephalus (*hydrocephalus vacuo*.) There was no change in the vessels. The other organs were healthy. The author shows by statistics that cerebral syphilis in children is rare. He had only been able to find twelve recorded cases. In one-half there was disease in the arteries and in one-half gummata. These gummata occurred mostly in the base of the frontal lobe, partly as yellow-

ish centres of softening and partly as calcified masses. In one case the brain was atrophied and sclerosed. Only four of the twelve cases occurred under one year of age. Although the parents of the infant appeared quite healthy, it was ascertained that the father had syphilis eight years previously, for which, however, he was thoroughly treated. Most of the twelve cases had external manifestations of syphilis as well as cerebral symptoms. Among the latter were noted nystagmus, dilatation of one pupil, diplopia, optic atrophy, swelling of the optic disc, chloroiditis, loss of smell and hearing, hemiplegia, anæsthesia, paralysis of single nerves, mental symptoms and fits. In the author's case there was no external evidence of syphilis, and no symptoms which could be put down exclusively to cerebral disease. The author then refers to the difficulty of diagnosing cerebral syphilis from other forms of cerebral disease, and yet the diagnosis is essential owing to the importance of early treatment.—*Brit. Med. Jour.*

#### SOME ANOMALIES OF THE CRANIA OF THE INSANE.

Bianchi and Marimo have examined over a thousand skulls of insane persons. Among their conclusions are the following: They believe that cranial anomalies are, perhaps, more dependent on the locality from which the persons came than on the diseases or the degree of intelligence of the individuals. In so-called degenerative forms, purely bony anomalies related to cerebral development are more rare than in psycho-neurotics. There is no direct relation between insanity and cranial anomalies, but these are much more common in the skulls of the insane.

#### MEDICAL EMERGENCIES.

The *American Practitioner and News* publishes the following list of medical emergencies, which are all worthy of noting.

**ACCIDENTS IN GIVING ANÆSTHETICS.**—Tincture of digitalis hypodermically; draw out the tongue and see that respiration is not mechanically impeded; invert the patient quickly and temporarily; use forced respiration promptly, apply external warmth and stimulation; avoid the exhibition of alcohol.

**ANGINA PECTORIS.**—Inhalation of chloroform, or a few drops of nitrite of amyl; 1-100 grain of nitro-glycerine, internally; placing the feet in hot water; mustard to the precordial region; dry cup between the shoulders; hypodermic injections of morphine and atropine; administrations of stimulants and anodynes.

**APOPLEXY.**—Elevate the head and shoulders; if pulse is moderately strong and the brain congested, bleed from the arm freely, sixteen ounces or more; eleterine (one-sixth grain) or croton oil, two drops in a drachm of sweet oil or glycerine; cold to the head by means of an ice bag.

**ASPHYXIA.**—In drowning, hold the patient's head downward for a few seconds. In hanging or choking, bleed from the jugular. If there is obstruction to passage of air through the mouth or nose, open tracheæ. Artificial respiration at once and to be continued. Friction, warmth, warm bath (100°), ammonia to nostrils, galvanizing of phrenic nerve.

**ASTHMA, SPASMODIC.**—Hypodermic of atropine into the nape of the neck; inhalation of smoke of stramonium leaves; fluid extract of nux vomica, internally alcohol, ether, chloral, opium; inhalation of chloroform cautiously administered.

**COLIC, GALL.**—Morphine, hypodermically; inhalations of chloroform; hot applications to the abdomen.

**COMA.**—Dark room; head high and cool; head shaved; low diet; croton oil; if due to compression antiseptic trephining; if due to anæmia, philocarpine and hot baths.

**HEAT STROKE.**—Remove clothing, sprinkle with water, cold cloths to the head, hot cloths to feet; antipyrin; bleeding in robust subjects. After temperature is reduced give alcohol and diffusible stimulants, hypodermically if necessary.

**PULMONARY HÆMORRHAGE.**—If severe, raise the thorax, administer opiate; gallic acid, fifteen grains, every fifteen minutes; ergotin, five to ten grains hypodermically, two or three times daily; ice bags to the chest; as a last resort a ligature may be thrown around the larger limbs. (Tyson).

**HÆMORRHAGE FROM STOMACH OR BOWELS.**—Tannic acid, ten to fifteen grains, if due to capillary oozing. If from typhoid fever or ulcer of the stomach, treat as for pulmonary hæmorrhage.

**HICCUGH.**—Acid drinks, cold douches, ether or chloroform internally, externally



or by inhalation; musk, opium, anti-spasmodics.

**HYSTERIA.**—Inhalations of ether or chloroform, for the spasms. If this is contra-indicated, give mono-bromide or camphor, musk, valerian, assafetida, the bromides. In convulsive seizures, morphine and atrophine hypodermically.

**SHOCK.**—Warmth; hot water bottle to feet, flanks and epigastrium; warm effusion to head; horizontal position; frictions, stimulants, brandy, ammonia, galvanism to precordia.

**STRANGURY.**—Vesical, hypodermic injection of morphine, to be followed by other remedies; rectal enemata of starch water and laudanum, followed by a hot sitz-bath.

#### MONSTROUS HYPERTROPHY OF THE PROSTATE.

Dr. Adler presented at the Freie Verein der Chir., in Berlin, the following history: A patient of sixty-six years had for fifteen years suffered from difficulty in urination, but had used the catheter without trouble until recently, when severe bleeding was occasioned by its introduction. Suprapubic and, subsequently, perineal cystotomy were done, but no permanent relief was afforded. The blood oozed from the prostate as from a sponge. The Paquelin canter was employed, but death soon took place. The prostate measured  $6\frac{1}{2}$  centimetres wide and 20 centimetres long.

#### INSOMNIA OF ALCOHOLISM.

Krafft Ebing speaks very highly of methylol as a hypnotic in this condition. It is employed hypodermically in doses of fifteen minims of a ten per cent. aqueous solution, from one to three times in twenty-four hours.—*Med. Record.*

#### SURGERY.

##### A NEW ANTISEPTIC.

Professor Emmerich of Munich has introduced a new antiseptic substance named oxychin aseptol, which he claims will prove fatal to the pus coccus (*staphylococcus pyogenes aureus*) in 0.3 per cent. solution. The drug should be of value in the treatment of gangrene and other putrefactive diseases, and being cheaper than carbolic acid, may be worthy of trial as a substitute for the latter agent.

#### THE SCHWALBE TREATMENT OF HERNIA.

Steffen (*Correspondenzblatt für Schw. Aerzte*, xxii., No. 2) discusses the report of Heidenthaler in regard to the results obtained in Billroth's clinic in the treatment of herniæ by the method of Schwalbe. He says the poor results are due: 1. To the shortness of the treatment. 2. To the fact that the injections were made without sufficient intervals intervening, and therefore produced an acute inflammation and inflammatory products that were easily absorbed. 3. They were too few in number and too near together. The treatment is one more applicable to private practice and dispensary work, where patients can be under treatment for a long time with long intervals between the injections, producing a chronic inflammation with the production of connective tissue, than it is to hospital practice where the patient occupies so much time and where the methods of Macewen and Bassini produce quicker results. He describes his own method of procedure, with which he obtained favorable results with the treatment of Schwalbe.—*Amer. Jour. Med. Sci.*

#### A NEW METHOD OF PRODUCING LOCAL ANÆSTHESIA.

Dr. Wiesendenger describes in the *Jour. für Zahnheilkunde* a new method of producing anæsthesia by the application of cold, the characteristic feature of which is not the cold-producing agent which touches the desired part, but a metallic tube or chamber which is cooled by carbonic acid. The cold may, according to the requirements of the case, be regulated from the temperature of cold water to one sufficiently low to cauterize. The first symptom of this artificial cold is anæmia of the cellular tissue, producing a slight sensation of burning, which is followed by anæsthesia, which lasts from one to two minutes and then disappears without any ill effects.

As the instrument may be manufactured of almost any shape, it is evident that this new method may be used for a variety of purposes. The simple turning of a tap will regulate the stream of carbonic acid to any degree of temperature down to 4° F. No moisture is produced. In using this cold for the purpose of cauterizing, the surgeon has the advantage of producing anæsthesia at the same time. When

applying it to any of the internal cavities, such as the mouth, it is necessary to have the parts carefully dried, as the tissues would otherwise adhere to the instrument. Dr. Kummel applied the method in the case of a boy in the Maria Hospital at Hamburg with such complete success that the boy looked on without moving a muscle while a deep incision of twelve centimetres in length was made in his thigh.

Other gases which can be brought into a fluid state may be used in place of carbonic acid. The carbonic acid which has been used for purposes of anaesthesia may be led into a vessel which has been tested to a pressure of three atmospheres, and is provided with a manometer and safety-valve, whence it could be used as an agent for preserving food. An iron bottle of fluid carbonic acid at a pressure of fifty atmospheres is sufficient for fifty operations. This can be bought for four or five shillings. The instrument for the application of cold to the tissues costs thirty shillings.—*The Lancet*.

#### OPERATIVE TREATMENT OF PES TALUS PARALYTICUS.

Eugène Rochard (*Rev. de Orthop.*), employs two methods: The shortening of the tendo Achillis by excision of a portion of the same or by an oblique incision and attaching both portions to each other, followed by the transplantation of tendons by the blending of peronei with the insertion of the tendo Achillis. The shortening of this tendon by Walsham's and Willet's method was almost completely successful in seven cases; in no case was there a complete failure. However, the period of observation was not long enough in these cases. Gibney by oblique separation reached quite excellent results in seventeen cases—in eight cases, satisfactory results,—and in but three cases was he unsuccessful. Kirmisson also obtained a good result in a similar case. The author modifies the latter process by adding a lateral freshening to the simple lapping over each other of the separated parts of the tendon, thus increased chances of union with shortening being offered. Which of these methods is to be preferred is to be determined by a careful examination of the individual muscles. If the gastrocnemius, plantaris and soleus are only atrophic and not completely paralyzed, the anomaly being exclusively caused by

an exceedingly strong tension of the tendo Achillis, simply shortening is to be recommended. But if the muscles are completely paralyzed,—which, however, occurs but rarely, it almost without exception following infantile paralysis—the transplantation of tendons is to be employed in order to connect the peronei. Arthrodesis is to be employed only clear cases of dangle foot. The good results of the operation are, of course, lessened by secondary changes in the plantar arch by retraction of the plantar fascia, etc. *A priori*, however, the idea (Fayette Judson) that a weakened muscle must not be allowed to act as it may be injured thereby is to be abandoned.

#### GENERAL RESULT OF REMOVAL OF TUBES AND OVARIES.

Dr. Wharton Sinkler has given some interesting facts as to the effect of the removal of these organs. In first place, he claims it unjustifiable to remove these organs for the relief of neurasthenia and hysteria where marked disease is not found. It is an undoubted fact that cases of neurasthenia have been cured where even structural changes in the ovaries have taken place. And again, it is the fact that patients are, in some cases, more nervous after than before operation. It is claimed that cures have resulted in epilepsy and insanity, particularly in those cases associated with pain and aggravation of symptoms at the menstrual period, and, as well, these diseases have followed operations. Gain in flesh is marked only where the operation has been performed for pus tubes, etc. Growth of hair on the face, change of voice and acquirement of masculine traits are very rare. Sexual appetite and faculty for the enjoyment of same unchanged, though it must be said that in time (year) it seems to diminish, which may be by the natural result of age.—*Annals of Gyn. and Ped.*

#### COMPOUND ELIXIR OF IODINE.

This is the name suggested by Wm. Pepper, M. D., (*University Med. Magaz.*, Feb., 1892, p. 376) for a preparation made by dissolving phosphorus, 1-100 grain, and iodide and bromine, each, 1 grain, in one drachm of simple elixir. It has been used with considerable satisfaction in cases of torpid circulation with subacute gastric catarrh, and of subacute

bronchitis with a relaxed and atonic state of the system. An elixir of balsam or of white pine may be used as the solvent, to which the name of *Compound elixir of pine* might be appropriate.—*Amer. Jour. Pharm.*

#### INTUBATION OF THE LARYNX.

Schmiegelow reports four cases of intubation for croup with three deaths (in a child aged eight, from acute paralysis of the heart; in a child aged nine months, from descending of the diphtheritic process; in one aged eleven months, from pneumonia), and one recovery, in a child aged three.

Schmiegelow performed intubation in eight cases of chronic stenosis, six of which were cases where there was difficulty in getting rid of the canula after tracheotomy, while one case was that of a man, aged twenty-four, who had contracted, as a child, a cicatricial stenosis of the trachea from tracheotomy, and who had at times difficulty in breathing; one was a case of aphonia spastica. The author advocates intubation (1) in cases of acute stenosis due to edema of the larynx; or (2) to diphtheria, when the asphyxia is so developed that there is no time for tracheotomy; or (3) when permission to do the latter operation cannot be obtained; (4) in cases of paralysis of the abductors or spasms of the abductors; (5) in cases of foreign body in the larynx; when there is no time for tracheotomy; (6) in cases of acute stenosis from thyroiditis; (7) all cases of chronic stenosis.—*The Satellite.*

#### THE TREATMENT OF HÆMORRHOIDS.

At a meeting of the Medical Society of London, Lauder Brunton dwelt upon the influence of cold and over-eating in the development of hæmorrhoids. Mercurials, followed by mild salines, are useful in preventing hepatic congestion. Aloes, in large doses, may conduce to the development of hæmorrhoids by over-stimulation of the muscular coats of the rectum. Small doses, on the contrary, exert a beneficial influence. Hepatic congestion due to cold may be relieved by the application of hot water bags to the nape of the neck and over the liver. Patients subject to hæmorrhoids should accustom themselves to emptying the bowels at night, so as to secure rest in the recumbent posture.

When there is much irritability at the anus it is preferable to use a soft sponge and water instead of paper more or less harsh. A pledget of animal wool dipped in hamamelis and introduced into the rectum will act as a mechanical support and as an astringent. In obstinate cases an anal pad may afford great relief.—*Med. Progress.*

#### THE PATHOGNOMONIC SIGNS OF PERFORATING APPENDICITIS.

Dr. Simon Baruch (*Med. Record*) emphasizes the point that symptoms of shock, carefully looked for, may always be found in perforating appendicitis. These are as follows: the countenance is anxious, the finger-tips, nose and ears are cool; pulse and respiration are out of proportion to temperature, the right inguinal region is very tender, the patient usually lies with the right leg drawn up. Guided by them, Dr. Baruch opposed the views of an experienced physician in one case, insisting upon the operation; and in another did not approve of the operation advised by an experienced surgeon. In both cases his reliance on these pathognomonic signs proved useful to the patient. On the ground of his own experience, as well as that of others, the author urges that when performing appendicitis is diagnosed, either positively or probably, an immediate operation to remove the exciting cause is as imperative as ligation of the vessel in hæmorrhage.

The fact that laparotomies are now constantly performed, under strict asepsis, with absolute safety, should induce the attendant to clear up a doubtful diagnosis of perforating appendicitis by an operation before septic peritonitis forbids it.

#### OBSTETRICS.

##### CHLORATE OF POTASH IN HABITUAL ABORTION.

E.S. McKee in *American Practitioner and News* says:

I have had some noteworthy results in repeated abortions from the use of chlorate of potash. In one case where the patient had aborted ten times while married to two different husbands, fifteen grains of chlorate of potassium were given three times a day; also tr. ferri chloridi, and two children were brought to term and



born alive. No cause could be found in this case, but from the history and the time of the occurrence fatty degeneration of the placenta was suspected. The use of this remedy was first suggested by Sir James Y. Simpson, who employed it on the theory that an abundance of oxygen was supplied to the fetus by this means through the placental tufts. He gave it because of disease of the placenta, but also believed that it was a means of arterIALIZING the blood. He was led to the use of this remedy by the experiments of Davy and Stephens, who found that an alkaline salt when brought into contact with the blood gave it an arterial appearance. From the large amount of oxygen contained in each atom of the chlorate of potash, Simpson argued that the maternal blood would be better oxygenated, and the child's respiration thereby improved by its administration. Anæmic patients improve in color under this drug.

Alkalies are promoters of waste and assist the removal of inflammatory products. Patients who had not gained under tonics and nutrients will improve in weight and strength upon the withdrawal of these remedies, waste producers, provided their use has not been too long continued. It is a well recognized fact that there is an excessive accumulation of carbonic acid in the presence of inflammatory changes of tissue. In the presence of carbonic acid nascent oxygen is formed from chlorate of potash, which may show how the inflammation is relieved and oxygen furnished the fetus. It is claimed on good authority that the chlorate of potash does not part with any great amount of oxygen at the body temperature, yet there remains the fact that by increasing the alkalinity of the blood its oxydizing function is augmented. Whatever its *modus operandi*, whether as a tonic or by its decomposition in the blood, thus directly furnishing an increased quantity of oxygen to the fetus through the placental tufts, or whether it puts the blood in such a state that it is able to carry an increased supply of oxygen, the clinical fact stands that it has a direct beneficial effect in properly selected cases, that is, where there is fatty degeneration of the placenta.

Shoemaker, in his new edition, recommends chlorate of potassium in placental inadequacy where there is deficient oxyge-

nation of the blood. He gives it in 15 grain doses three times a day, thus preventing disease of the placenta, and enabling a woman to go on to term who had previously miscarried a number of times.

#### OUGHT INFANTS TO BE WASHED IMMEDIATELY AFTER BIRTH?

In a paper read before the Section on Diseases of Children at the Detroit meeting of the American Medical Association, Dr. F. S. Parsons, of Boston, says:

All wild animals dress their young directly after birth. The human mother, however, cannot perform such duties in the manner of the lower animals, whose offspring, moreover, are covered with hair, necessitating simply the drying of a wet surface; but the child, with practically no hair on the body, is ushered from an aqueous solution at a temperature of about 100° F., to an aerial temperature of from 20° to 30° lower. Apparently, to guard against this sudden cold, Nature has placed a sebaceous covering, which, if allowed to remain, would protect the child from the chilling influences of the reduced temperature. Dr. Parsons, however, does not so much object to the washing of the child as to the manner in which it is generally done, and which so often leads to catarrhal troubles, varying from simple snuffles to broncho-pneumonia. He recommends a little skirt with sleeves and hood, made of some soft unirritating material—for example, Canton flannel—in which the infant should be placed, after being quickly rubbed with pure hog's lard. Here it should remain for four or five days, when it would become accustomed to the lowered temperature, and could with much more safety be washed; but as this would not satisfy the average mother, he would advise covering the head and body with lard, then quickly placing the child in a tub of water at about 103° F. there cleaning and washing the body with a soft linen cloth. He has never seen a child so treated suffer from catarrhal troubles in any way.—*Medical News*.

#### RETAINED PLACENTA AFTER ABORTION.

J. A. Winter (*American Gynecological Journal*) gives the history of a case in which an abortion occurred and metrorrhagia supervened for the following six

months when decided uterine hæmorrhage appeared. Upon the supposition that some portion of the product of the last conception remained in the uterine cavity, the writer (who had not treated the patient at the time of the abortion) ordered fluid extract of ergot, in dram doses, at intervals of two hours, until three doses were given. The following morning, upon visiting the patient for the first time, the writer was shown a specimen of placenta and organized blood-clot, which had been expelled from the uterus during the night. The bleeding immediately ceased with the removal of its cause. Had the ergot failed to dislodge the mass the placenta forceps or curette would have been speedily used. During the discussion of the paper by the members of the Detroit Gynecological Society, the use of ergot for such cases was adversely criticised, for the reason that the drug is apt to cause contraction of the lower as well as of the upper portion of the uterus. In cases where the os is tightly closed, opium is advocated to relax the cervix, and the employment of ergot is to be restricted to those cases in which the os is patulous. Concerning the treatment of abortion in general, the sentiment of the society was unfavorable to the so-called expectant plan. As soon as it becomes evident that an abortion is inevitable, the only safe plan to pursue is that of emptying the uterus. In reference to methods, the finger is to be used when practicable, the placenta forceps or curette at other times. There was some difference of opinion as to the best method of dilating the constricted os uteri, either for the purpose of expelling the ovum or for the control of hæmorrhage. Braun's colpeurynter was relied upon by some members, while a tampon of iodoform gauze packed into the cervical canal (one-half to a yard long by one inch wide) was preferred by others. The thorough disinfection of the vagina, before and after the removal of the uterine contents, is obviously necessary.—*Arch. Gyn., Obst. and Ped.*

#### GYNECOLOGY.

##### CANNABIS INDICA IN THE PAINFUL DISEASES OF WOMEN.

Dr. J. B. Mattison, of Brooklyn, praises cannabis highly as an anodyne and hyp-

notic. It is not a poison, there is no fatal case on record. It must be given in full doses. Small doses are stimulating and exciting, large ones sedative. It is equally useful in dysmenorrhœa, especially of the spasmodic variety, and in painful chronic metritis. In many cases of uterine cancer it allays or prevents pain. It acts well in megrim, in the neuralgias, and headaches so common in anæmic women. It is a safe and excellent hypnotic in insomnia. The tincture must be given in doses of twenty to sixty minims, and of the solid extract, one-half to two grains. Farlow recommends the following suppository in dysmenorrhœa, to be introduced every night, beginning five days before the time of the period:

R Ext. cannabis indica.....  
Ext. belladon..... gr. j.  
Ol. theobrom..... 5 j m.  
—*Chicago Medical Times.*

#### LATENT GONORRHŒA IN WOMEN.

In these days we hear and read much of the woeful effects of latent gonorrhœa in woman contracted from the husband who supposed he was cured of the result of his folly, some time—a year perhaps, before his marriage. We believe that medical men ought to be very guarded in giving permission to marry to young men who have, within a short period, contracted a gonorrhœa, or who suffer from a gleety discharge. Want of caution in this matter is probably the reason why an unfortunately large number of young women, married in the best of health, fall into chronic ill health shortly after marriage, or become, in two or three months, victims to a fatal metritis or perimetritis after abortion.

In cases of this chronic gonorrhœa, the leucorrhœa is of itself of little diagnostic importance, as it may vary with wide limits, both as regards quantity and transparency, but it is usually yellowish-colored, as if mixed with pus, and non-transparent as it flows from the cervix uteri. The cervix is usually surrounded with an intensely red erosion, of some lines in width. The uterus is usually tender, and the regions of its mucous membrane adjacent to the mouths of the Fallopian tubes are specially tender. Inflammation of the urethra at an early stage of the disease is of great value, but it soon passes away. Much more value must be attached

to the condition of the vulvo-vaginal glands, and the glands of Bartholin. The vulvo-vaginal glands are enlarged, and the vulva is sensitive. The existence of inflammatory catarrh of the glands of Bartholin is an important sign. On separating the labia minora from the remains of the hymen between the first and the under lateral caruncula myrtiformis in a woman who in former years has suffered from gonorrhœa, it is the rule to see an intensely red point, covered over with glairy mucus, from which as a centre a red streak, constantly becoming fainter, stretches upward and outward, and gradually becoming pale, passes over into the color of the surrounding mucous membrane.—*Mass. Med. Jr.*

#### ELECTRICITY IN PELVIC TROUBLES.

On the use of electricity for pelvic troubles, Dr. Price says: "It is utterly incomprehensible how any sane man can advocate the use of electricity; it seems that it is only in such hidden regions as the pelvic that the electricians claim any resulting good from their treatment. Why not apply this all-powerful, this infallible and omnipotent curative effect of electricity to the resolution of abscesses found in the neck of strumous children? Certainly wealthy mothers would pay well, even handsome fees, to save their children from carrying through life loathsome scars, not to mention the satisfaction of the operator upon curing his patient without the deformity resulting from the formation of a cicatrix."—*National Med. Review.*"

#### OFFICIAL LIST OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT, U. S. ARMY, OCTOBER 2, 1892, TO OCTOBER 8, 1892.

Major Robert H. White, Surgeon, U. S. Army, is relieved from duty at Fort Myer, Virginia, to take effect on the expiration of the leave of absence granted him, and will then proceed to report in person to the commanding officer, Jefferson Barracks, Mo., for duty.

Major Daniel G. Caldwell, Surgeon, U. S. Army, is relieved from duty at Jefferson Barracks, Mo., and will report in person to the commanding

officer, Madison Barracks, N. Y., for duty at that place.

Captain William C. Gorgas, Assistant Surgeon U. S. Army, is relieved from duty at Fort Barrancas, Florida, and will report in person to the commanding officer, Fort Reno, Oklahoma Ty., for duty at that post, relieving Captain John L. Phillips, Assistant Surgeon.

Captain Phillips on being relieved by Captain Gorgas, will report in person to the commanding officer, Fort Myer, Virginia, for duty.

Captain Henry D. Turrill, Assistant Surgeon, U. S. Army, is relieved from duty at Madison Barracks, N. Y., to take effect on the expiration of his present leave of absence, and will report in person to the Commanding Officer, Fort Riley, Kansas, for duty at that post, relieving Major John R. Hoff, Surgeon U. S. Army.

Major Hoff on being relieved by Captain Turrill, will report in person to the Commanding Officer, Fort Columbus, New York, relieving Major Johnson V. D. Middleton, Surgeon, U. S. Army.

Major Middleton, on being relieved by Major Hoff, will report in person to the commanding officer of the Presidio of San Francisco, California for duty at that post.

The leave of absence granted Major Alfred A. Woodhull, Surgeon U. S. Army, is extended ten days.

Captain Junius S. Powell, Assistant Surgeon, U. S. Army, is relieved from duty at Fort Randall, South Dakota, to take effect upon the final abandonment of that post, and will then report to Fort Monroe, Virginia and report in person to the commanding officer of that post for duty.

Major Robert M. O'Reilly, Surgeon U. S. Army will be relieved from duty at Fort Logan, Colorado, and will report for duty as Attending Surgeon in this city, on December 15, 1892.

Captain Alonzo R. Chapin, Assistant Surgeon, U. S. Army, is relieved from duty at Fort Yates, North Dakota, and will report in person to the commanding officer, Fort Hancock, Texas, for duty at that station.

Captain Eugene L. Swift, Assistant Surgeon, U. S. Army, is relieved from duty at Fort Grant, Arizona, Terry, and will report in person to the commanding officer, Fort Yates, North Dak., for duty at that station.

Lieutenant Colonel Frances L. Town, Deputy Surgeon General, U. S. Army, is relieved from duty at the Presidio of San Francisco, Cal. and will report in person to the commanding officer, Fort Porter, N. Y., for duty at that station.

Major Egon A. Körper, Surgeon U. S. Army, is relieved from duty at Fort Walla Walla, Washington, and will report in person to the commanding officer, Willets Point, N. Y. for duty at that station, relieving Major Clarence Ewen, Surgeon.

Major Ewen on being relieved by Major Körper will report in person to the commanding officer, Fort Walla Walla, Washington, for duty at that station.